

South Waterfront District

Street Plan, Criteria and Standards



Updated November 2009
CITY OF PORTLAND
BUREAU OF TRANSPORTATION

Prepared by
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South Waterfront District

Street Plan, Criteria and Standards



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OVERVIEW

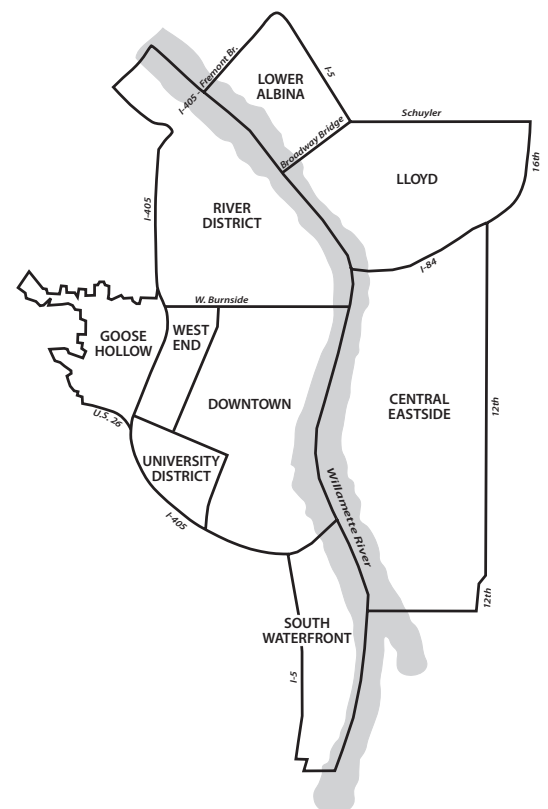
In 1996, the Portland City Council accepted the City Engineer's Report titled *North Macadam District Street Plan*, which identified and classified a street system for the North Macadam District. On January 20, 2003, City Council adopted amendments to the Central City Plan and updated the District's special design guidelines and the zoning code. At the same time, City Council changed the North Macadam District name to South Waterfront District (the District). By authority of the City Engineer under Title 17 City Code, the *South Waterfront Street Plan, Criteria and Standards* was amended in 2007 providing updated design criteria and standard details for the District's public rights-of-way. The 2009 document update amends the North District (the area south of Sheridan St and north of Gibbs St) rights-of-way alignment and standards to accommodate future light rail and property development, as well as expanded streetcar service and bicycle and pedestrian infrastructure.

The South Waterfront District of the Central City of Portland lies along the Willamette River and south of downtown. The district boundaries are the River, Interstate 5, the Marquam Bridge and SW Hamilton Court. Adopted City policy envisions this as a mixed-use neighborhood with significant residential development along the River and commercial development focused along transit corridors. With just over one mile of River frontage the District contains approximately 140 acres. Some land is developed or being developed and some land is vacant land or has redevelopment potential.

The primary development constraint in the District is transportation access to and from regional highway and transit systems. The *South Waterfront Plan* of January 20, 2003 includes a vision, policies and an Urban Design Plan that promotes high density housing and commercial development with a full range of businesses that contribute to the region's job growth. The vision also includes frequent public connections to the river, limiting the size and amount of surface parking lots, and integrating development and services.

In 1998 the *North Macadam District Street Design Standards and Criteria Plan: Transportation Report* considered and analyzed South Waterfront's limited access and adjacency to I-5 and Ross Island Bridge ramps. The analysis included the three district portal intersections: River Parkway and Harbor Drive (north), Curry and Macadam (center) and Bancroft and Macadam (south). The analysis was based on the District's 20-year goals for accommodating 10,000 jobs and 3,000 housing units and a 30 percent mode split. The housing goal has since been increased to 5,000 units. Conclusions were:

- Bancroft and Macadam portal improvements would accommodate traffic growth and transit access at acceptable levels of service.



South Waterfront (North Macadam District) became part of the Central City in 1988.



- Moving the central portal from Gibbs to Curry and improving the Curry and Macadam intersection would better accommodate traffic operation, growth and access from I-5 to the District.
- As the District's growth nears 10,000 jobs and 5,000 housing units, portal access will degrade and as a result function at a marginally acceptable level.
- River Parkway and Harbor Drive would operate at acceptable levels although backups on I-5 and Naito Parkway could interfere with operations on a more frequent basis in the future.

The 1998 transportation analysis demonstrated that while the District will experience increased congestion over time, the portal capacity with the identified portal improvements and increased transit service should continue to provide acceptable levels of service to the District and the regional transportation system.



Since the 1998 report, plans for portal improvements have been altered. Through the South Portal Study, conducted in 2006, the recommended south portal shifted south to Hamilton St and Macadam. In addition, the planned central portal improvements at Curry have been scaled back and north portal improvements at River Parkway and Harbor Drive have been added. In fact, in 2009 the Portland Bureau of Transportation updated the technical analysis through the *North Macadam Transportation Development Strategy* (resolution no. 36696 adopted April 8, 2009). The report identified multi-modal project priorities and a funding strategy to guide project implementation necessary to support continued development of the urban renewal area, including portal improvements.

The 2007 update of the *South Waterfront District Street Plan, Criteria and Standards* primarily responded to development in the Central District and completion of infrastructure projects, including the Portland Streetcar extension to Lowell St and the Portland Aerial Tram to Oregon Health Sciences University. Transportation studies, such as the 2004 *South Waterfront District Transportation Improvements Evaluation* and 2006 *South Portal Study* had also been completed. Major updates included changes to the street lighting design standards, certain street furniture standards, and the modification of the street plan based on the recommendations of the *South Portal Study* and the new *Greenstreet Policy* (resolution no. 36500 adopted in April of 2007). Other changes included modest refinements to various street dimensional standards developed through preliminary engineering and construction of these streets and to refinements of various performance criteria.

OVERVIEW

Update 2009

Since the 2007 update, the City of Portland has endorsed the locally Preferred Alternative (LPA) for the Portland to Milwaukie Light Rail alignment. This alignment will extend light rail south into the North District and include bus service and streetcar utilizing the same alignment. In addition, the OHSU Schnitzer Campus master plan and the North Macadam Transportation Development Strategy report, with a prioritized list of multi-modal projects and a funding strategy, have been completed. This activity has generated the need to refine and update various elements of this document.

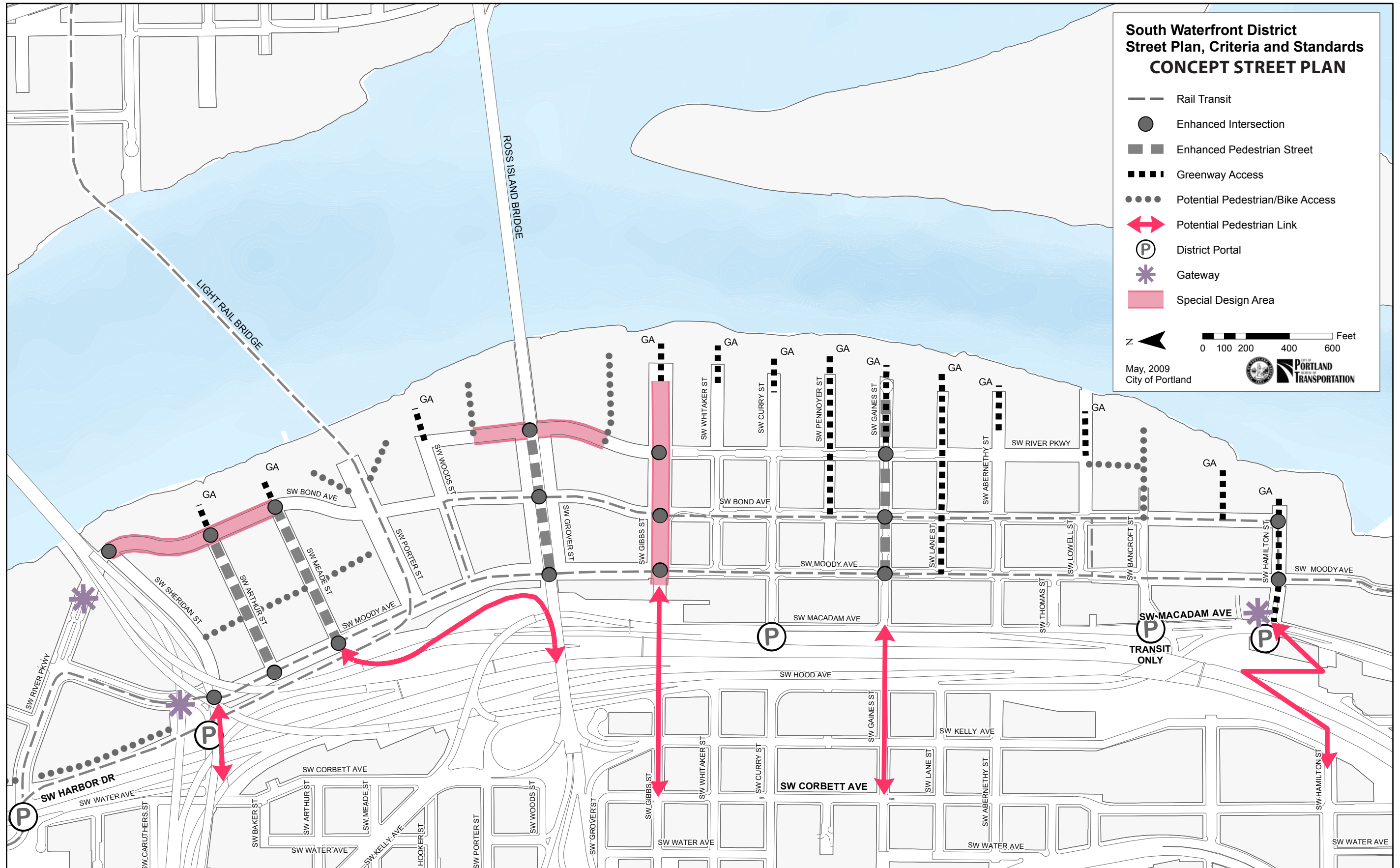
Major updates include changes to the street alignments and designations in the Concept Street Plan Map, updates of some street widths in the Right-of-Way Width Map changes to street descriptions in the Street Classification and Function Table, and adjustments to the Standard Street Sections.

Specific changes made to the Concept Street Plan map are as follows:

- Bond Ave extends north through the District.
- Bond Ave is one-way northbound through the District.
- Moody Ave becomes one-way southbound for vehicular traffic through the District; and one-way southbound for streetcar south of Woods St.
- Moody Ave remains two-way streetcar north of Woods St.
- Moody Ave includes a two-way bike path along the west-side to minimize bike/streetcar interactions.
- The grades of Moody Ave and Porter St are raised to a level consistent with the Willamette River Crossing Partnership findings necessary for light rail.
- Porter St carries light rail, streetcar and bus in two directions only; private vehicles are not accommodated on this street.
- River Pkwy (south of the Marquam Bridge) terminates at Woods St.
- Alignments are adjusted for local east-west streets north of Gibbs St.
- “Special Design Area” beneath the Ross Island Bridge has been relocated to reflect the location of the potential active-use park.
- Grover St is aligned on either side of the Ross Island Bridge.

An extensive public process was undertaken to share the proposed changes to this document and receive feedback. On June 11, 2009, eighty-two people attended an open house illustrating proposed updates to the *South Waterfront District Street Plan*, Criteria and Standards. In addition, the project team presented the document updates to four

neighborhood associations, two City advisory committees, and four City commissions. Feedback was overwhelmingly positive. Input from the Pedestrian Advisory Committee resulted in additional pedestrian connections on the Concept Street Plan map where no streets are shown. All feedback has been collected and, where appropriate, incorporated into this document update.



STREET PLAN

BACKGROUND

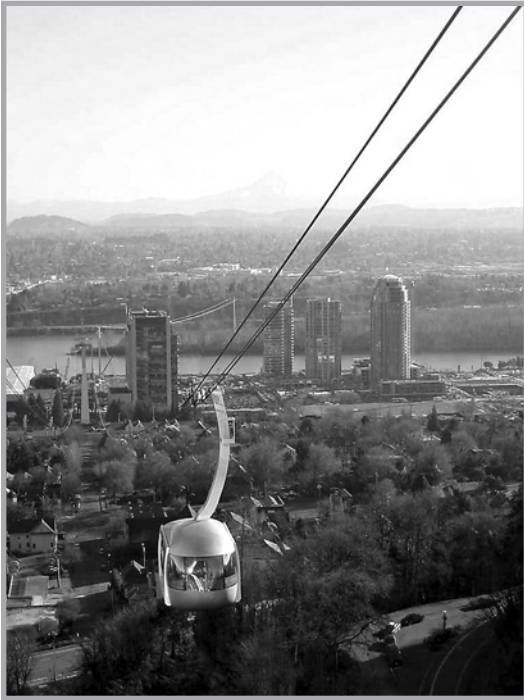
In 1996, the Portland City Council accepted the Engineer's Report titled *North Macadam District Street Plan*. This plan identified and classified a street system for the North Macadam District. The Engineer's Report also listed a number of Next Steps that included additional transportation engineering, land use and zoning changes and street design criteria and standards. These Next Steps became work scope elements of the *Framework Plan, Right of Way Criteria and Street Standards* document and the *Proposed Revisions to the Central City Plan, Willamette Greenway Plan I and Title 33, Zoning Code*.



The work for this document, including South Waterfront District public right-of-way design criteria and standards, began in 1997 with the appointment of a 37 member Work Group and a Technical Advisory Committee (TAC). The Work Group included neighborhood representatives, business and property owners and public agency representatives. The TAC was comprised of City, Metro, Oregon Department of Transportation (ODOT), and TriMet representatives. The process advanced to approximately 60% completion, but was halted to focus on the development of the *North Macadam District Framework Plan*.

In 1999, the Metropolitan Policy Advisory Committee recommended that the Metro Council adopt an *Interim Framework Plan* which included requirements to implement key elements of Metro's 2040 Growth Concept. Among the Growth Concept's requirements are those related to street connectivity and subdivision layout. Upon the completion of the *Interim Framework Plan* in 1999, work on the street plan resumed, and the North Macadam District Street Standards Committee (SSC) was formed from the previous transportation Work Group. Their charge was to finish the street plan and the right-of-way criteria and street standards. The SSC reconciled previously drafted street standards with the *North Macadam District Framework Plan* concepts and guiding principles. They made refinements and recommendations to the criteria and standards to guide public right-of-way improvements to completion.

In 2001, the City of Portland began development of a broad-reaching update to the *North Macadam District Framework Plan* to set policies, zoning code, design guidelines and actions for the South Waterfront. The *North Macadam District Right-of-Way Criteria and Street Standards* document process was suspended at 95% completion to enable the City of Portland to complete the *South Waterfront Plan*. City Council adopted the *South Waterfront Plan* in November 2002 and it became effective January 20, 2003.



PURPOSE

A defined street plan, design criteria and standards for streets provide certainty to City staff and other agencies, as well as property owners and businesses within the district. The criteria and standards establish a common understanding of required improvements within the public right-of-way. City policy also requires that special design standards within the public right-of-way be established for development application review. Private and public developments within the South Waterfront District are subject to the *South Waterfront Plan*, *Zoning Code for South Waterfront* and the *South Waterfront Design Guidelines and Greenway Design Guidelines for South Waterfront*, and to design review by the Design Commission through the Bureau of Development Services (BDS). Improvements within the public right-of-way are reviewed through this document and are approved by the City Engineer.

The primary intent of this document is to establish a South Waterfront District street plan that coordinates private and public development objectives. The document lays out the network of public rights-of-way to assure development of an urban form that supports high-density development and increases the access and mobility opportunities for pedestrians, bicyclists and transit riders.

The *South Waterfront District Street Plan, Criteria and Standards* provides a balanced transportation system that utilizes two primary multi-modal streets for north and south travel and extends the existing grid from the west, eastward to the River. Each street serves a specific function and provides choices for pedestrian, bike and transit mobility and access throughout the District. The plan also provides opportunities for even traffic distribution within the District. The use of integrated traffic control techniques such as narrow travel lanes, curb extensions, and traffic circles with public art help prevent “short cuts” and through traffic on local streets.

In 2003, the South Waterfront District had few streets. Traditionally, the area supported ship and barge building with warehousing and manufacturing upland from the riverfront. Recently, sand and gravel operations covered much of the District, while barge building continues under the Ross Island Bridge. Active warehouse businesses lined Moody and Bond, while most of the waterfront was vacant. By 2007, much of the central portion of the District has undergone significant redevelopment of high-rise residential buildings. North of the Ross Island Bridge, the Oregon Health Sciences University is planning a major expansion of its campus.

STREET PLAN

Much of the original District was roadless and consisted of large staging and “lay-down” storage areas with no defined circulation system. The existing street system is a remnant of an industrial road and access network that connected various uses and functions within private developments. Without a fundamental framework for future development, the urban form of the District would potentially be defined on a case-by-case, project-by-project basis. Historically, this pattern of development has led to traffic, transportation and land use conflicts. Early in the planning process stakeholder interviews identified numerous opportunities, constraints and issues. Design principles were established based on the District’s special design guidelines, the District vision and City and regional policy.

Development of the street system should be sensitive to existing uses. In many cases, some existing uses may remain for some time into the future and require similar access and staging as is currently found in the District. For example, there are viable businesses along Moody that continue to need access, staging and storage while housing and office uses develop next door. Ultimately, accommodating existing uses while incrementally establishing a street network to support new development respects property owner’s current needs and produces a distinct and attractive urban form.

As with the introduction of any new street design standards, there are some existing transportation facilities in place that do not conform to the standards described in this document. It is the City’s expectation that, with redevelopment, these new design standards will be applied. However there are some previously approved street design standards in the *South Waterfront Central District Project Development Agreement* (August 22, 2003) that are not entirely consistent with new standards. Because the agreement was in place before adoption of these proposed standards, PBOT shall continue to honor those design commitments reflected in the Development Agreement. In the event the Development Agreement is terminated or subsequent future redevelopment occurs outside of that which is proposed in the Development Agreement, the new design standards would then be applied as appropriate.

STREET PLAN PRINCIPLES

Guiding principles were established as part of the *North Macadam Street Plan* accepted by City Council in 1996 based on planning work within the District and interviews with agencies, property owners and other stakeholders. These principles have been revised to be consistent with the *South Waterfront Plan*, adopted by City Council in November 2002. They are as follows:





Land Use: Provide a street plan that allows for the transition of current land uses and existing development. The plan should provide a network of streets that can be phased. Phased street improvements should preserve viable businesses while creating a complete and functional system. “Slivers” of bonus provision areas, Floor Area Ratio and Building Height designations should be avoided.

Adopted and Previous Plans: Ensure consistency with the *South Waterfront Plan*, including relevant policies and objectives and the Transportation Concept. Respect and incorporate relevant previous planning work.

Block Size: Provide block faces of no less than 200 feet and no greater than 500 feet. Block dimensions should promote a walkable and accessible pedestrian environment while creating developable parcels. Consider the implications of creating small or irregular remnants of land or irregular block patterns. The block system should also provide an opportunity to appropriately distribute traffic throughout the District consistent with street classifications. Block dimensions should be consistent with Metro and City policy.

Portals of Access: Provide access into the District; there are a limited number of portal access points. Hamilton St, Curry, Sheridan, and River Parkway at Moody Ave are the District portals of access.

Entry Features: Identify the transition from one place to another and are placed at the three gateways – River Parkway/Bond, Moody/Sheridan, and Hamilton/Macadam. Features such as public art, lighting, identity elements and landscape should reinforce the limited number of ways into the District.

Primary Mobility Streets: Provide primary mobility streets that accommodate pedestrian, bicycle, transit, streetcar, automobile and service vehicle uses. Mobility streets should carry and evenly distribute north and southbound traffic within the District. The classification, function, design priority and section should be consistent with current City policy. South of the Ross Island Bridge, a one-way couplet on Bond and Moody provides the primary mobility function. Within the northern part of the District, Moody is currently the primary mobility street. However, the Moody-Bond one-way couplet will extend through the entire District once the area north of the Ross Island Bridge redevelops. A one-way couplet provides the function of a typical arterial street on two streets with narrower cross sections.

STREET PLAN

North-South Access Street: Creates a special place in the District and fosters a sense of neighborhood. It should bind the community together and to the River with an emphasis on pedestrian access. It should serve local traffic from the district portals while at the same time discouraging through, north and southbound traffic. River Parkway is the north-south local access street east of Bond and south of Woods that connects with east-west streets throughout the District.

East-West Streets: Frequent east-west streets create view corridors and pedestrian access to the River and Willamette Greenway. They should also provide local access to parking facilities, residences and businesses. East-west streets should be aligned perpendicular to the riverbank to reinforce its importance in the District.

Green Accessways: Provide ways to ensure frequent pedestrian, bike and visual access through large blocks. Accessways in some cases are an alternative to a full street improvement. Incorporate “green” stormwater management solutions where possible to provide stormwater detention and treatment. Incorporate planting of communities of native and native-like vegetation to provide habitat and serve as a visual link to the riverfront.

Coordination with Transit Alternatives: Develop the street plan to accommodate light rail, streetcar and bus alignment alternatives.

Green Infrastructure: Develop “green” infrastructure consistent with the Green Streets Policy adopted by City Council in April 2007 and the Transportation System Plan update and “Greenway Extensions” shown on the South Waterfront Plan Transportation Concept Map.



STREET STANDARDS DESIGN PRINCIPLES

The following principles were developed to lead the creation of the 2003 street standards that are specific to the *South Waterfront Plan*. They reflect key elements of the *Framework Plan* which envisions a high quality environment. These principles will guide future right-of-way development to achieve this vision.

Streets: When developing new streets, consider design, function, and short and long-term cost effectiveness. Use materials that minimize environmental impacts and consider recycling materials from existing structures in the District.



Enhanced Pedestrian Streets: Reinforce pedestrian comfort and convenience with an emphasis on wider sidewalks, human scale street lighting, special landscape, street trees and building access. Provide visual and physical connections to District destinations such as transit facilities, parks and the Greenway.

Gateways: Create special features that identify the transition into and out of the District by using portal light poles, street trees, landscape and public art.

Connectivity: Provide connectivity to the River, adjacent neighborhoods, RiverPlace, Macadam and Corbett/Terwilliger Lair Hill (South Portland). Use paving, street furnishings and color in seasonal landscape plantings to define places and streets in the District. Use street trees that contribute to the naturalistic qualities desired for the Greenway and access connections.

Sidewalks: Sidewalks should be as wide as possible and a minimum of 12 feet with defined furnishing, pedestrian, curb and building frontage zones. Create smooth, continuous sidewalks in 3-foot modules.

Sidewalk Zones: Identify furnishing and building frontage zones on each street. Encourage pervious surfaces or landscape in all furnishing zones to minimize runoff.

Paving Patterns: Use paving patterns that are consistent and compatible throughout the District. Ensure that paving patterns allow ease of access and minimize sawcuts necessary for utilities, maintenance and repairs.

District Image and Identity: Enhance and promote the Marine/Industrial image and identity. Consider using a variety of tools, including paving materials, street lights, street furnishings and street trees to reinforce the unique character of specific types of streets and the District's overall image and identity.

Accessibility: Assure that the Americans with Disabilities Act requirements are met and address accessibility considerations.

Street Lighting: Provide lighting within the public right-of-way that lights streets and pedestrian areas to create a safe and inviting place.

Reduce Pole Clutter: Where possible, combine pole functions into a single pole, to reduce the number of poles in the furnishing zone and to create more available space for street trees, landscaping, benches, etc. This should be done by combining streetlight and traffic signal poles, or streetlight and catenary poles, wherever feasible.

STREET PLAN

Street Trees: Use trees to reinforce the function and character of the specific rights-of-way and streets, and to reinforce places within the District.

- **Environmental:** Select and optimize placement of tree species and other landscaping to promote species diversity, intercept rainfall, absorb surface runoff, capture pollutants, shade and cool impervious surfaces, conserve energy, and reduce the need for irrigation with potable water.
- **Canopy:** Use trees that provide protection and shade for pedestrians and to cool impervious surfaces.
- **Parks:** Select street trees that complement park uses and enhance the public right-of-way.
- **Framing Architecture:** Tree forms should relate to architecture framing views to and from buildings and views of building elements. Use trees that complement views to store fronts.

Views: Recognize east-west views to the River, between districts and adjacent neighborhoods; and north-south through the District.

Open Character: Strive for a level of transparency and lightness with a priority of public views over private views.

Greenway: Enhance and contribute to the Greenway and open space network. Encourage complementary street design and an appropriate transition from the Greenway to places within the District.

Utilities: Locate utilities, vaults, driveways and other improvements to preserve existing trees and to allow future trees to be installed in the planned pattern. Utilities should be underground and respond to tree locations.

Stormwater Management: Incorporate “green” stormwater management* to provide stormwater detention, treatment and infiltration where possible. Create multi-objective approaches that cool the air and water, improve the pedestrian environment, and enhance habitat values and nearby property values through “green” landscaped stormwater facilities (see green infrastructure).

Green Infrastructure: Incorporate “green street” stormwater management* solutions where possible to provide stormwater detention and treatment. Intercept precipitation, and filter and clean pollution from stormwater runoff and filtrate where appropriate. Reduce and improve the quality of stormwater runoff through the use of vegetated landscaped stormwater facilities and pervious surfaces and landscape.



Street Life: Design streets, sidewalks and street furniture to encourage activity between the development and the sidewalks and streets.

* Definition of “green” stormwater management as per Bureau of Environmental Services: The integration of stormwater into the built environment through onsite surface stormwater management techniques that mimic natural conditions, allowing rain to soak into the ground and or filter through vegetation for flow control and water quality purposes.

DESIGN STANDARDS

STREETS

The street plan focuses on the Willamette River, land use and open space network. It creates a balanced multi-modal transportation system with east-west streets providing pedestrian circulation and service access while north-south streets provide transit, pedestrian, bike and vehicular mobility within the District. East-west streets are comprised of local and enhanced pedestrian streets that are regularly spaced and provide convenient access from north-south streets to businesses and residences. East-west streets also extend to the river through fourteen Greenway Access connections. North-south streets are the backbone of the District's multi-modal transportation system. These streets - Bond, Moody and River Parkway - accommodate transit, pedestrian, bike, and District through access. Local streets provide access to parking facilities, on-street loading, on-street parking and local circulation.

Enhanced Pedestrian Streets:

Frequently spaced, these streets (Gaines, Grover, Meade and Arthur) favor walkers with wider sidewalks and pedestrian scale street lighting. Gaines and Meade are streets where wide sidewalks incorporate layered plantings while managing stormwater. Both streets hold the potential to connect to Corbett/Terwilliger/Lair Hill either through an overcrossing (Gaines) or a pathway along I-5 and the Ross Island Bridge (Meade).

Enhanced Intersections:

Enhanced intersections are those where Enhanced Pedestrian Streets intersect the three north-south streets - Moody, Bond and River Parkway - or are at gateway intersections. These intersections emphasize pedestrian activities such as sidewalk cafés and retail display. Curb extensions reduce pedestrian crossing distance, help calm traffic and provide a potential location for streetcar stops. Cast-in-place concrete intersections help identify Enhanced Pedestrian Streets to residents, visitors and motorists. An alternative to cast-in-place concrete in the furnishing zone of curb extensions is landscape or unit pavers.

Greenway Access:

Street connections to the Willamette River Greenway between River Parkway or Bond and the River are to be developed as Greenway Access connections, where pervious surfaces, landscape and pedestrian access are the priority. Greenway Access connections extend the Greenway landscape upland into the District and are identified in the *Concept Street Plan* to provide connectivity throughout the District. They primarily connect the interior of the District to the Willamette River Greenway at 14 locations.



Greenway Access connections provide an opportunity for landscape areas that use native and native-like plants (cultivars and hybrid varieties of native species) and are designed to manage stormwater runoff. They will contain a minimum of 50% landscaping within 100 feet of the Willamette River Greenway planted with native and native-like species including groundcovers, shrubs and trees.

Potential Pedestrian/Bike Access:

Additional pedestrian and bike access is desirable from Bancroft at Bond to the River, from River Parkway at Lowell to the south, from River Parkway to the Greenway along the edges of the potential active recreation park, and from Porter to Sheridan as an element of the proposed OHSU Schnitzer Campus. The specific routes of these connections are dependent on the configuration of future development.

Potential Pedestrian Link:

Five identified potential pedestrian connections over and under Interstate 5 could link the South Portland Neighborhood to the District and the Willamette River. As parks within the District are designed, PBOT will evaluate the opportunity for potential pedestrian links to the parks.

District Portals:

Portals are the primary access intersections to and from the District. Special features are encouraged at the portals that would contribute to the District's identity. There are three portals. The 'south portal', which is expected to accommodate the highest traffic volumes in and out of the District, is currently the Bancroft/Macadam intersection. However, per the 2006 South Portal Study recommendations this portal shall be relocated to an improved Hamilton St/Macadam intersection. The Curry/Macadam intersection provides direct access from I-5 northbound and Macadam northbound into the District. It provides access out of the District to I-5 northbound, I-84 eastbound, and southwest Portland at Kelly Ave, including Highway 26. Once improvements are constructed at Harbor Drive/River Parkway and along Moody Ave, the I-5 northbound access into the District at Curry/Macadam will be moved to Harbor Drive/River Parkway. The 'north portal' encompasses the Harbor Drive/River Parkway and Sheridan/Moody intersections, providing a direct connection between the District and downtown and between the District and Southwest Portland.

Gateways:

Special gateway features at key intersections would include special lighting fixtures, landscaping, and possible public art opportunities. The gateway locations include the following three intersections: River Parkway/Bond, Moody/Sheridan and Hamilton/Macadam. The River Parkway/Bond and Moody/Sheridan intersections will visually connect

DESIGN STANDARDS

the South Waterfront District to RiverPlace, Corbett/Lair Hill and downtown. The Hamilton/Macadam intersection will visually connect the South Waterfront District to the North Macadam area and John's Landing.

Special Design Areas:

There are three Special Design Areas - one on Bond, one on River Parkway, and one on Gibbs from Macadam to the River that provide opportunities to create distinct character and innovative solutions in the District. Special Design Areas on Bond and River Parkway are identified where the right-of-way and parks, open space or the Greenway interface. The northerly special design area is where Bond interfaces with the riparian habitat of the Willamette River Greenway. The special design area designation on River Parkway under the Ross Island Bridge is related to a proposed park and should be designed in coordination with development of the park. The special design area on Gibbs provides an opportunity to interface street improvements with the Central City Transit Hub development. Along this section of Gibbs, at the Transit Hub, is the aerial tram stop, Portland Streetcar stop, and future landing for the Gibbs Street Pedestrian Bridge, all of which emphasize pedestrian activity.

These special design areas provide flexibility for integration of roadway and open space design. This flexibility would include special roadway treatment (such as, but not limited to, unit pavers, scored concrete, curbless streets, cobblestones), lighting, signage and landscaping. Should any of these District elements change from those currently proposed, specific design designations would follow.

Green Streets:

Green Streets are required throughout the District as directed by Resolution 36500 adopted April 2007. The goal is to promote and incorporate the use of green street facilities in public and private development. Specifically, the policy states that green street facilities are to be incorporated into all City of Portland funded development, redeveloped or enhancement projects as required by the City's Stormwater Management Manual.

Green Streets:

- Handle stormwater on site through the use of vegetated facilities.
- Provide water quality benefits and replenish groundwater (if an infiltration facility).
- Create attractive streetscapes that enhance neighborhood livability by enhancing the pedestrian environment and introducing park-like elements into neighborhoods.



- Serve as urban greenway segments that connect neighborhoods, parks, recreation facilities, schools, main streets, and wildlife habitats.
- Meet broader community goals by providing pedestrian and where appropriate bicycle access.

Implementation of the Green Street Policy will reduce impervious surfaces, treat and filter stormwater at its source, reduce demands on the city's collection system, support regulatory compliance and enhance watershed health and community livability.

Moody-Bond Couplet:

The one-way couplet will extend through the entire District, from Sheridan to Hamilton, providing the primary north-south access. A one-way couplet provides the function of a typical arterial street on two streets with narrower cross sections. It also allows for optimal multi-modal mobility for automobiles, bus transit, streetcar, bicycles and pedestrians. The one-way couplet is currently in operation from Whitaker to Bancroft. Two-way operation of Moody north of Whitaker will be retained until Bond, from Whitaker to Sheridan, is constructed to complete the couplet. Bond will also be extended from Bancroft to Hamilton to extend the couplet south as identified by the south portal phase II project.

Bond will provide two travel lanes. The Bond right-of-way is 68 feet, though it will need to narrow to pass under the Marquam Bridge and connect with River Parkway's 50-foot right-of-way at Sheridan. Bond, south of Woods, will serve as a transit street through the District, accommodating Portland Streetcar and buses. Along all of Bond, sidewalks will be 13 feet wide, on-street parking will be accommodated on both sides of the street and there will be a one-way bicycle lane.

Moody will provide three travel lanes north of Gibbs and two travel lanes south of Gibbs. The Moody right-of way widths vary: from Sheridan to Gibbs is 84 feet, from Gibbs to Hamilton is 68 feet and south of Hamilton it is 52-feet. Moody will serve as a transit street through the District, accommodating Portland Streetcar and buses in a two-way configuration north of Woods and one-way south of Woods. From Sheridan to Gibbs, Moody will include a 16-foot wide, two-way bicycle path, as well as a 6-foot wide sidewalk on the west and a 15-foot wide sidewalk/stormwater facility on the east side of the street. Along this stretch, on-street parking will likely be accommodated on the west side of the street. Moody, from Gibbs to Hamilton St, includes a one-way bicycle lane, 13-foot wide sidewalks, and on-street parking on both sides of the street. From Hamilton St to Hamilton Ct, Moody will include a 15-foot wide multi-use path.

DESIGN STANDARDS

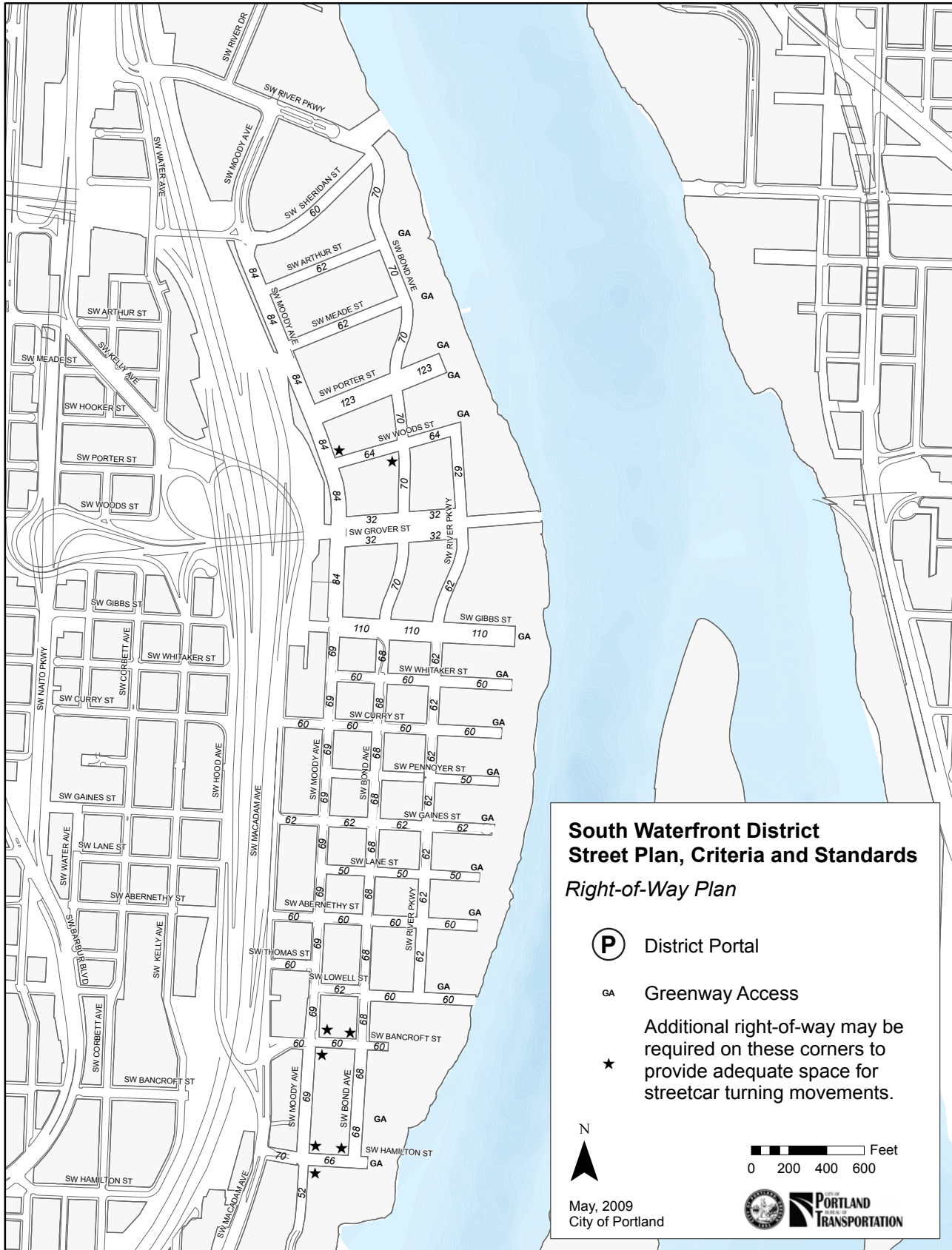
River Parkway:

In the South Waterfront District, River Parkway extends from Woods to Lowell. It fronts one of the District's major potential park spaces under the Ross Island Bridge and serves employment and housing in the area. River Parkway's right-of-way width is 62 feet, though it may need to narrow where it passes under the Ross Island Bridge.

Porter Street:

Porter Street extends east from Moody Avenue to span the Willamette River. The Porter Street right-of-way is currently designated at 123 feet, though that may be altered as the Portland to Milwaukie Light Rail project is further developed. Porter Street travel lanes are reserved exclusively for light rail and transit use. The right-of-way will also provide pedestrian and bicycle access.

RIGHT-OF-WAY WIDTH MAP



STREET CLASSIFICATION AND FUNCTION TABLE: STREETS

STREET	POLICY CLASSIFICATION	STREET FUNCTION	DEVELOPMENT/ DESIGN EMPHASIS	PUBLIC RIGHT-OF-WAY
Moody North of Gibbs	Traffic Access Street	Provide access to Central City destinations	Jobs emphasis	84 feet 41 feet curb-to-curb Existing right-of-way north of the north of the Ross Island Bridge is 65 feet therefore dedication is required.
	Major Transit Priority Street		No on-street parking	
	Off-Street Path	Provide connections between districts	Bicycle parking	
	Pedestrian-Transit Street		Bicycle Path (2-way)	
	Local Service Truck Street	Distribute traffic from regional trafficways, major city traffic streets to local service streets	Enhanced pedestrian environment	
	Major Emergency Response Street		Transit-oriented street features	
	Community Main Street	Streetcar and/or rail service	Transit priority measures where warranted	
		Bicycle mobility	Streetcar and/or rail service	
		One-way southbound (except streetcar)	Streetcar/rail design features	
			Central City District gateway	
Moody Gibbs to Hamilton	Traffic Access Street	Provide access to Central City destinations	Jobs emphasis	69 feet 44 ft curb-to-curb requires 2 foot dedication on the west and 4 foot dedication from the east side of the right-of-way as redevelopment occurs.
	Major Transit Priority Street		Integrate jobs and housing	
	City Bikeway	Provide connections between districts	Office commercial frontage	
	Pedestrian-Transit Street		On-street parking	
	Local Service Truck Street	Distribute traffic from regional trafficways and major city traffic streets to local service streets	Bicycle parking	
	Major Emergency Response Street*		Separated in roadway bikeway	
	Community Main Street	Streetcar and/or rail service	Enhanced pedestrian environment	
		Bicycle mobility		

STREET CLASSIFICATION AND FUNCTION TABLE: STREETS

		One-way southbound	Transit-oriented street features Streetcar and/or rail service Streetcar/rail design features Continuity of alignment and design throughout District	
Moody South of Hamilton	Local Service Traffic Street Major Transit Priority Street Off-Street Path Pedestrian-Transit Street Local Service Truck Street Minor Emergency Response Street*	Distribute local traffic Provide access to local services Provide transit access to Central City destinations Streetcar and/or rail service Bicycle access Two-way	Jobs emphasis No on-street parking Multi-use path (two-way) Enhanced pedestrian environment Transit-oriented street features Streetcar and/or rail service Streetcar/rail design features	52 feet 25 feet curb-to-curb
Bond	Traffic Access Street Major Transit Priority Street City Bikeway Pedestrian-Transit Street Local Service Truck Street Major Emergency Response Street Community Main Street	Provide access to Central City destinations Provide connections between districts Distribute traffic from regional trafficways and major city traffic streets to local service streets Streetcar and/or rail service Bicycle mobility One-Way northbound	Jobs emphasis Integrate jobs and housing Housing emphasis Retail and services emphasis On-street parking Bicycle parking Separated in roadway bikepath Enhanced pedestrian environment Transit-oriented street features Streetcar and/or rail service	70 feet 44 feet curb-to-curb

STREET CLASSIFICATION AND FUNCTION TABLE: STREETS

			Continuity of alignment and design throughout district	
			Special design area	
River Parkway	Local Service Traffic Street Local Service Transit Street Local Service Bikeway Local Service Walkway Local Service Truck Street Minor Emergency Response Street*	Distribute local traffic Provide access to local services Local transit service Bicycle access Two-way	Integrated jobs and housing On-street parking Bicycle parking Enhanced pedestrian environment Traffic circles Transit priority measures where warranted Central City District Gateway Special design areas	62 feet 36 feet curb-to-curb
Porter	Regional Transitway Major City Bikeway Pedestrian-Transit Street Minor Emergency Response Street	Interregional transit with frequent, high-speed, high-capacity connection to Central City Street-car and/or rail service Bicycle mobility Two-way (transit, pedestrian and bicycle only)	No on-street parking Separated in roadway bikeway Transit-oriented street features Transit priority measures where warranted Streetcar and/or rail service	123 feet 15 feet sidewalk and 8 feet separated in roadway bikeway curb-to-transit lane, both eastbound and westbound. Street lanes reserved exclusively for light rail and transit use.
Woods	Local Service Traffic Street Major Transit Priority Street Local Service Bikeway Pedestrian-Transit Street Local Service Truck Street Minor Emergency	Distribute local traffic Provide access to local services Provide transit access to Central City destinations Streetcar and/or rail service	On-street parking Transit-oriented street features Streetcar and/or rail service	64 feet 40 feet curb-to-curb

STREET CLASSIFICATION AND FUNCTION TABLE: STREETS

	Response Street	Bicycle access		
		Two-way		
Grover	Local Service Traffic Street	Distribute local traffic	On-street parking	64 feet local ROW, divided by ODOT ROW 32 foot right-of-way and 20 feet curb-to-curb, both eastbound and westbound
	Local Service Transit Street	Provide access to local services	Enhanced pedestrian environment	
	Local Service Bikeway	Provide access to Central City destinations	Greenway Access view corridor	
	City Walkway			
	Local Service Truck Street	Access to Greenway and transit services		
	Minor Emergency Response Street	Bicycle access		
		Two-way		
Gibbs	Local Service Traffic Street	Distribute local traffic	Retail and services emphasis	110 feet Special Design Area
	Transit Access Street	Provide access to local services	On-street parking	
	City Bikeway (Moody to River Parkway)	Access to Greenway and transit services	Bicycle boulevard	
	Off-Street (Pedestrian/Bike) Path (east of River Parkway)	Bicycle mobility	Bicycle parking	
	City Walkway (Moody to River Parkway)	Bicycle access	Enhanced pedestrian environment	
		Two-way	Enhanced pedestrian intersections	
	Local Service Truck Street		Transit-oriented street features	
	Minor Emergency Response Street		Special Design Area	
Lowell Moody to Bond	Local Service Traffic Street	Distribute local traffic	On-street parking	62 feet 38 feet curb-to-curb
	Major Transit Priority Street	Provide access to local services	Enhanced pedestrian environment	
	Local Service Bikeway	Provide transit access to Central City destinations	Green Accessway view corridor	
	Pedestrian-Transit Street			
	Local Service Truck Street	Access to Greenway and transit services		
	Minor Emergency Response Street*	Streetcar and/or rail service		

STREET CLASSIFICATION AND FUNCTION TABLE: STREETS

		Bicycle access		
		Two-way		
Hamilton Macadam to Moody	Traffic Access Street	Provide access to Central City destinations	No on-street parking	70 feet 48 feet curb-to-curb
	Transit Access Street		Transit-oriented street features	
	Local Service Bikeway	Provide connections between districts	Central City District Gateway	
	Pedestrian-Transit Street			
	Local Service Walkway	Distribute traffic from regional trafficways and major city traffic streets to local service streets		
	Local Service Truck Street			
	Minor Emergency Response Street			
	Streetcar and/or rail service			
	Bicycle access			
		Two-way		
Hamilton Moody to Bond	Local Service Traffic Street	Distribute local traffic	On-street parking	67 feet 43 feet curb-to-curb
	Major Transit Priority Street	Provide access to local services	Bicycle lane	
	City Bikeway	Provide transit access to Central City destinations	Transit-oriented street features	
	Pedestrian-Transit Street		Streetcar and/or rail service	
	City Walkway	Access to Greenway and transit services	Streetcar/rail design features	
	Local Service Truck Street		Greenway Access view corridor	
	Major Emergency Response Street	Streetcar and/or rail service		
	Bicycle access			
	One-way southbound			
Local Streets (Sheridan, Whitaker, Curry, Abernethy, Thomas, Lowell – east of Bond, Bancroft)	Local Service Traffic Street	Distribute local traffic	On-street parking	60 feet 36 feet curb-to-curb
	Local Service Transit Street	Provide access to local services	View corridors	
	Local Service Bikeway	Local transit service	Sheridan: Central City District gateway	
	Local Service Walkway			
	Local Service Truck Street	Access to Greenway and transit services		
	Minor Emergency Response Street			
	Bicycle access			

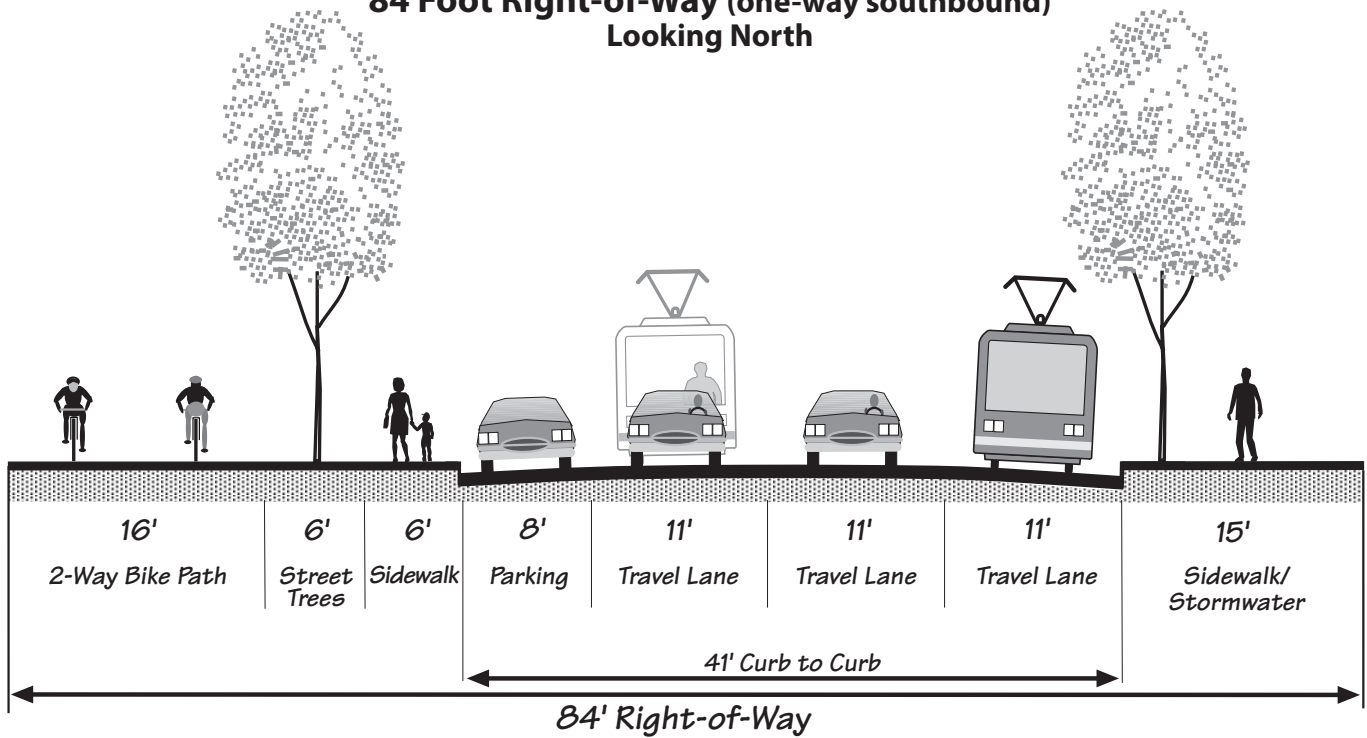
STREET CLASSIFICATION AND FUNCTION TABLE: STREETS

		Two-way		
Enhanced Pedestrian Streets (Arthur, Meade, Gaines; excluding Grover)	Local Service Traffic Street	Distribute local traffic	Retail and services emphasis	62 feet 36 feet curb-to-curb
	Local Service Transit Street	Provide access to local services	On-street parking	
	Local Service Bikeway	Local transit service	Bicycle parking	
	City Walkway	Access to Greenway and transit services	Enhanced pedestrian environment	
	Local Service Truck Street	Bicycle access	Gaines: residential east of Bond and River Parkway	
	Minor Emergency Response Street	Two-way		
Greenway Access Connections (Pennoyer, Lane, other GA extensions)	City Bikeway	Access to Greenway and transit services	Bicycle parking	50-60 feet 12-25 feet curb-to-curb
	City Walkway	Bicycle mobility	Cycle Track (two-way)	
		Bicycle access	Enhanced pedestrian environment	
		Two-way	Greenway access view corridor	

DESIGN STANDARDS

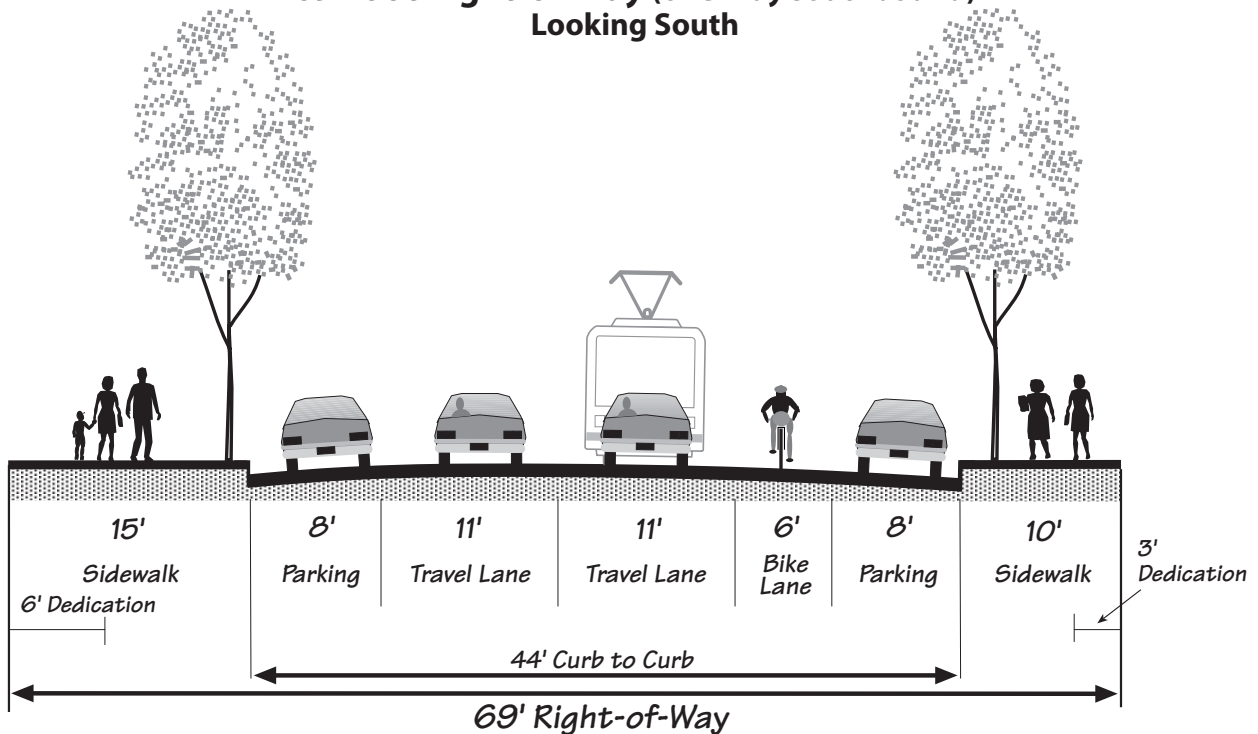
STANDARD STREET SECTIONS

Moody: North of Gibbs 84 Foot Right-of-Way (one-way southbound) Looking North



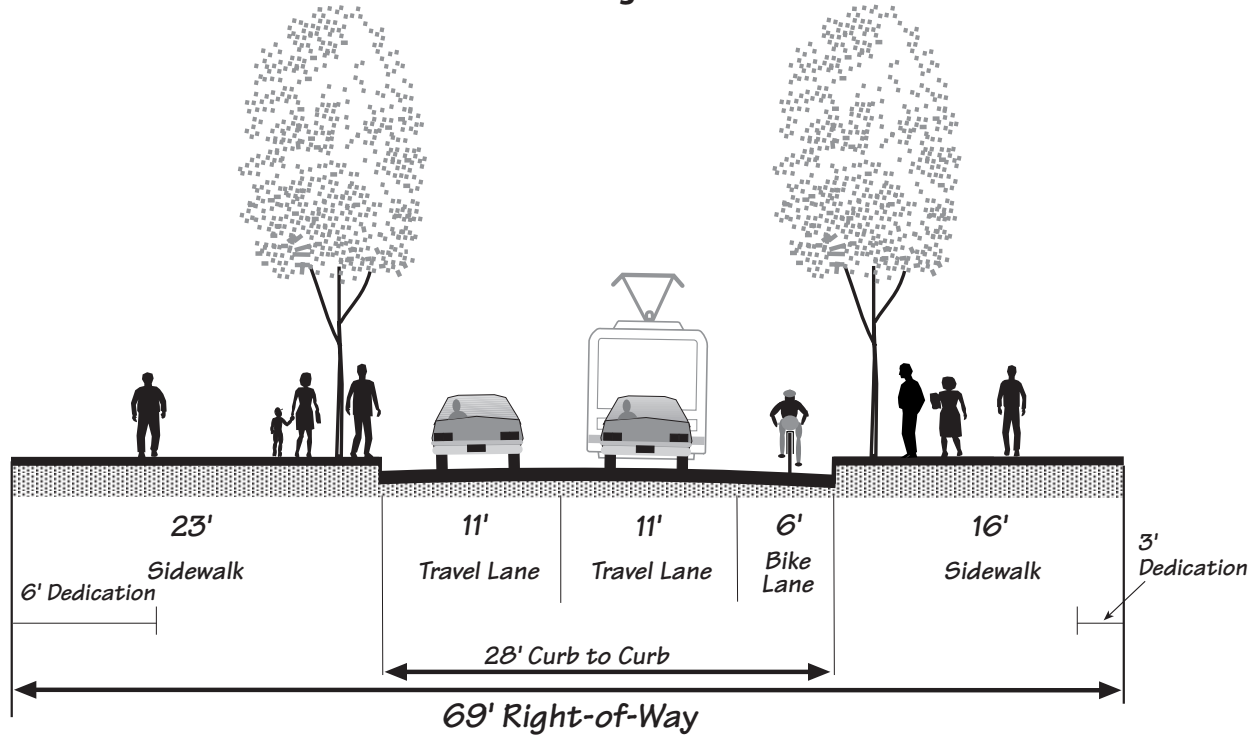
Note: Cross-section subject to change due to pending master planning.

Moody: Gibbs to Hamilton 69 Foot Right-of-Way (one-way southbound) Looking South

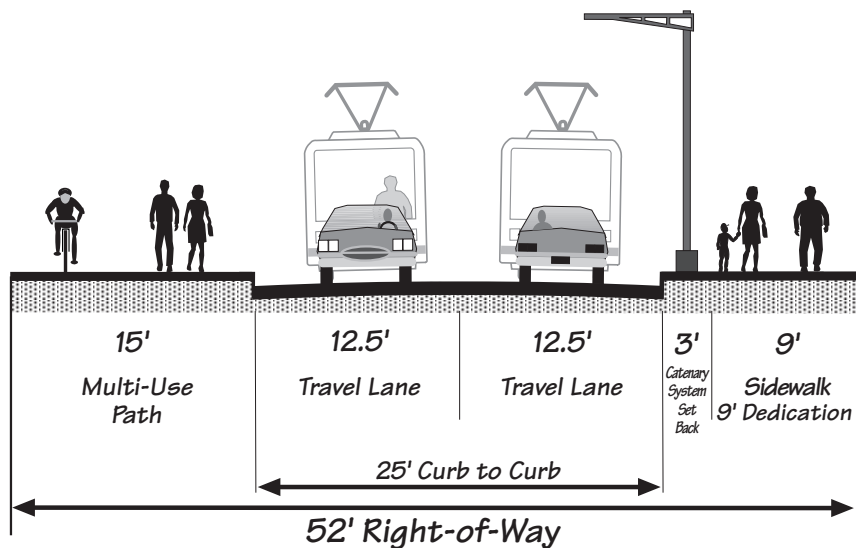


STANDARD STREET SECTIONS

Moody: Gibbs to Hamilton at Intersections 69 Foot Right-of-Way (one-way southbound) Looking South

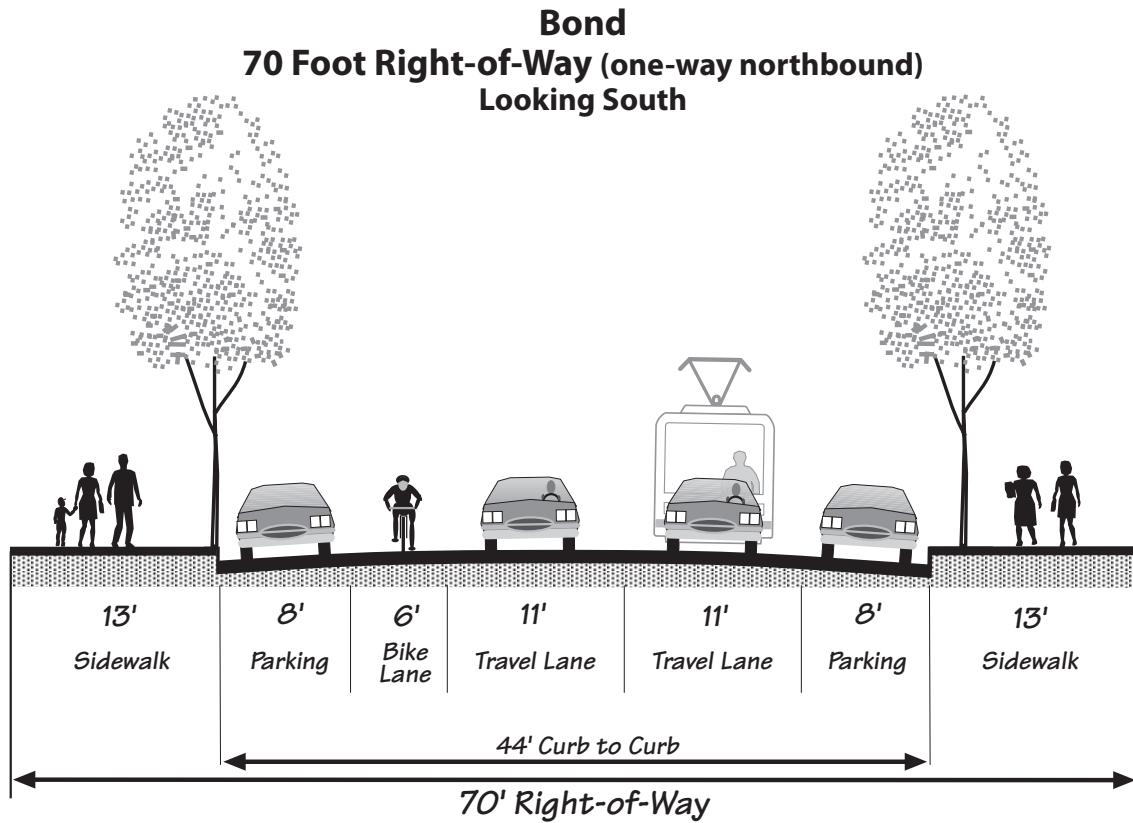


Moody: Hamilton St. to Hamilton Ct. 52 Foot Right-of-Way Looking South

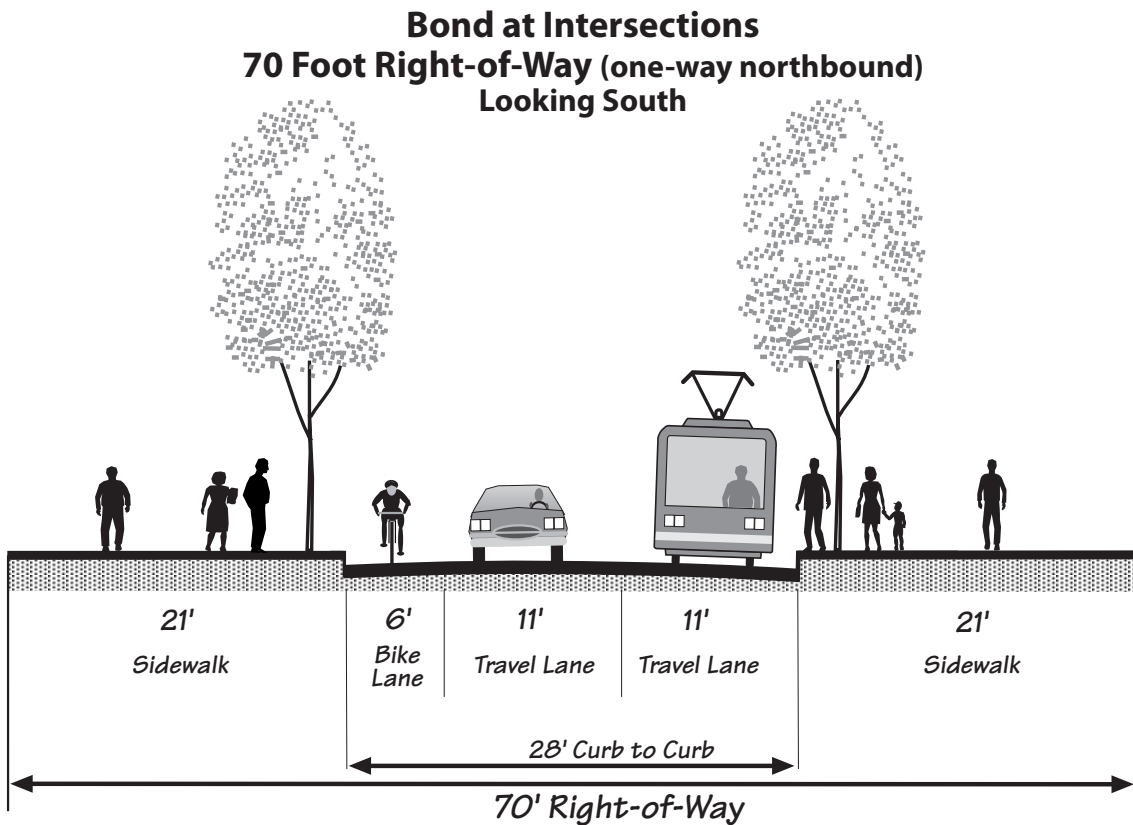


DESIGN STANDARDS

STANDARD STREET SECTIONS

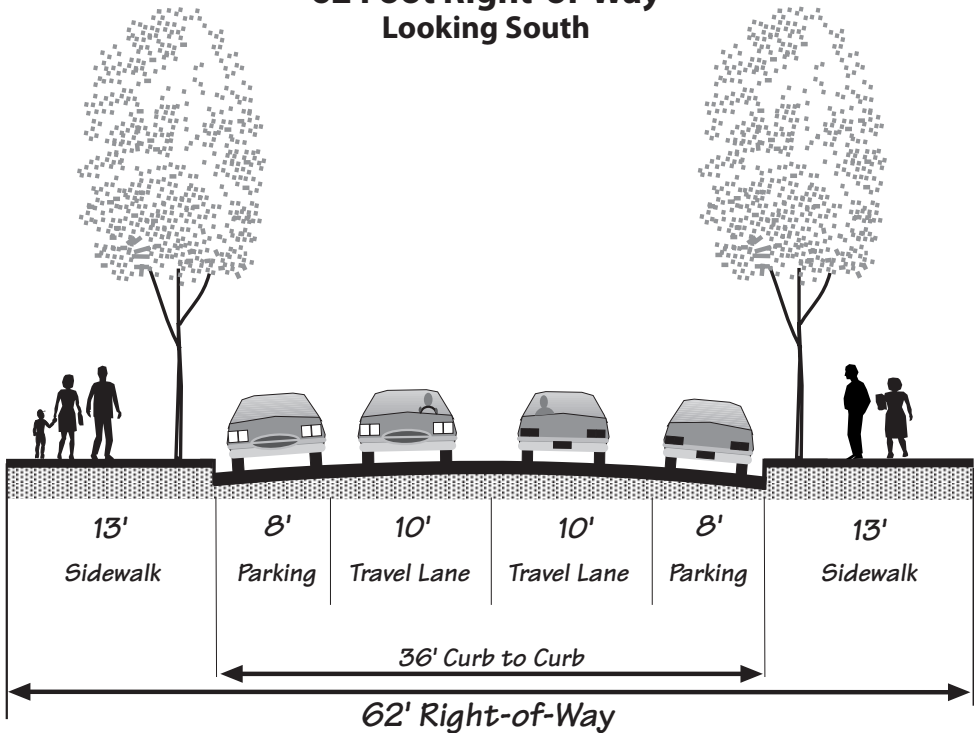


** Previous standard indicated a narrower lane width, therefore cross-section does not match existing roadway dimensions.*

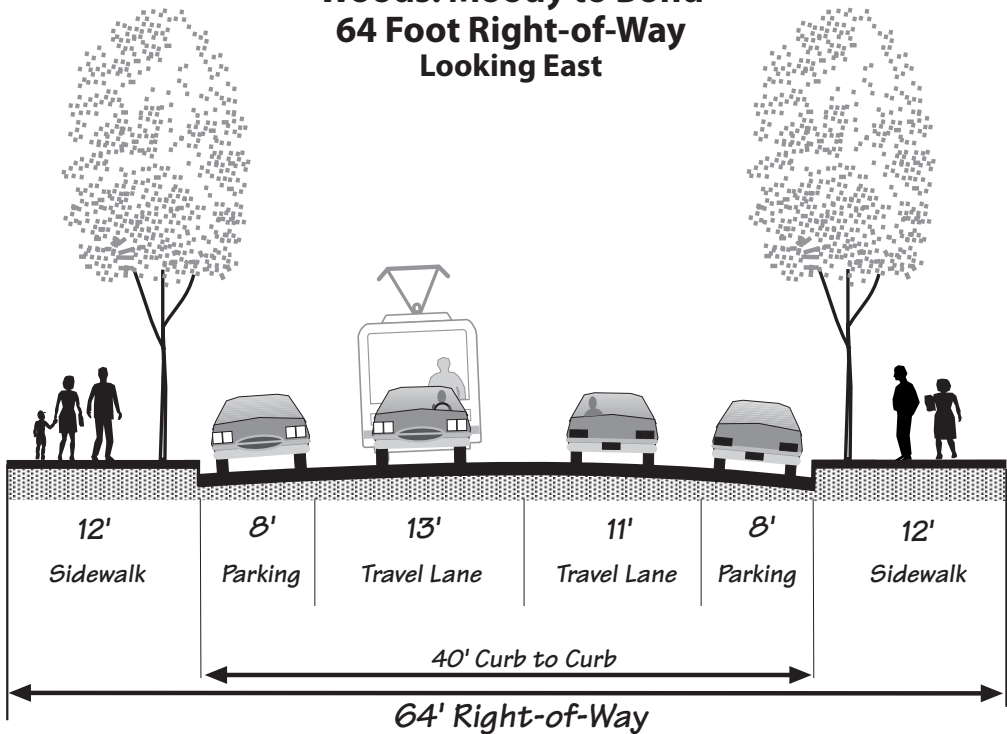


STANDARD STREET SECTIONS

River Parkway
62 Foot Right-of-Way
Looking South

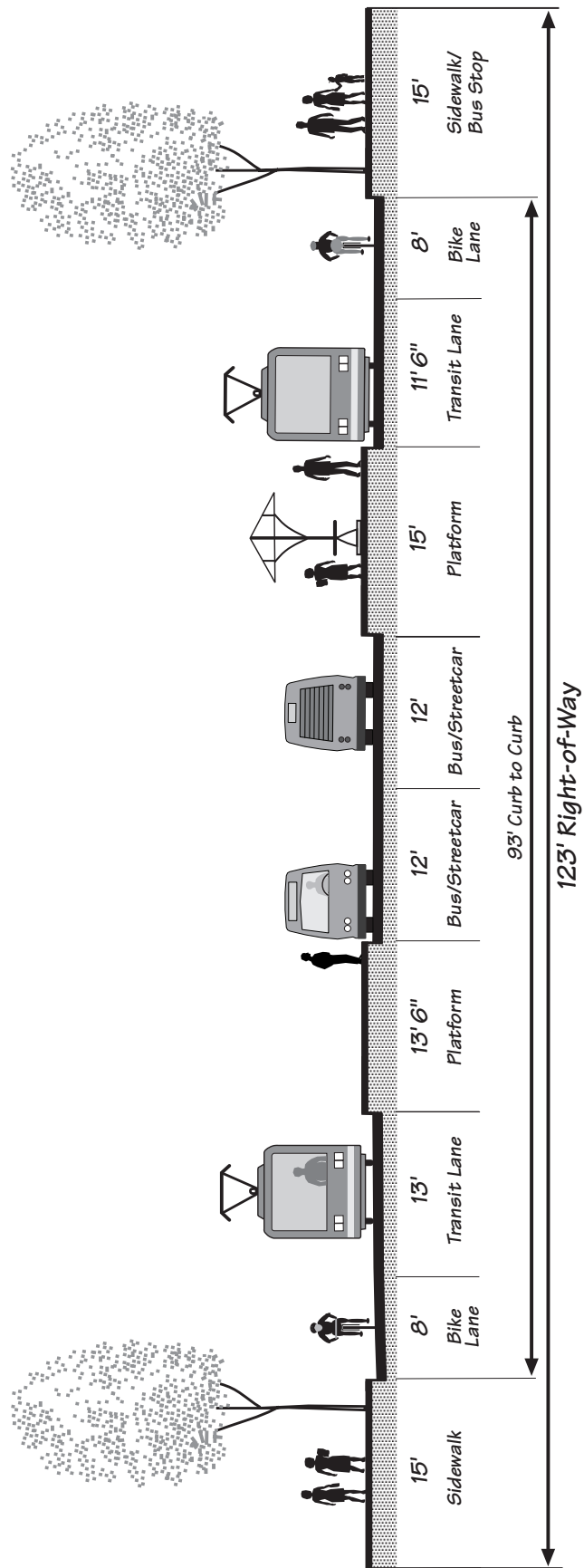


Woods: Moody to Bond
64 Foot Right-of-Way
Looking East



STANDARD STREET SECTIONS

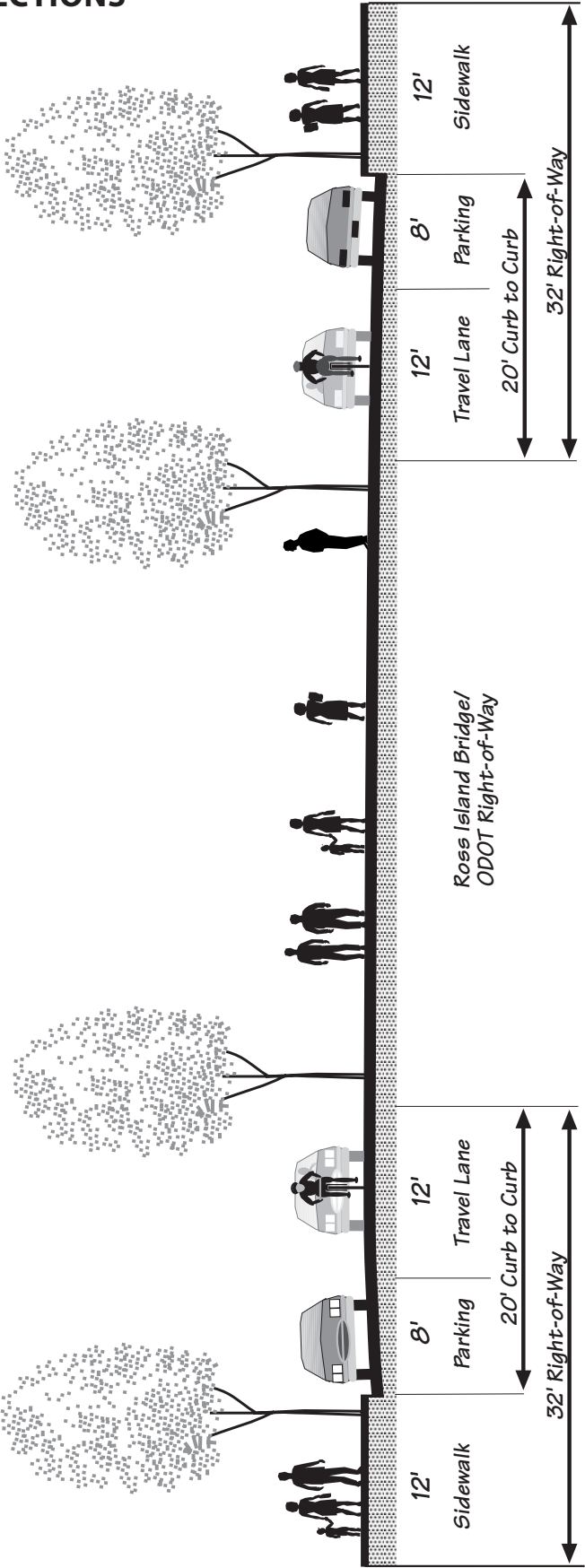
Porter at Moody Avenue Transit Station
123 Foot Right-of-Way



Note: Porter Street travel lanes are reserved exclusively for light rail and transit use.
Scale is not the same as other cross sections in this report.

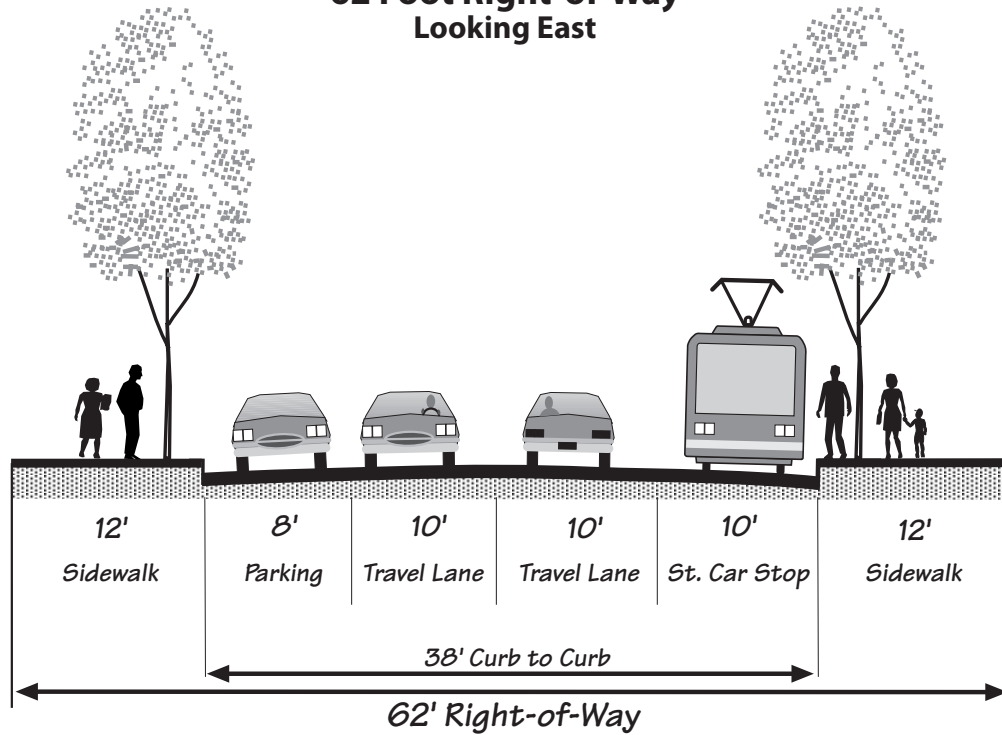
STANDARD STREET SECTIONS

Grover Street Promenade
64 Foot Right-of-Way
Looking East

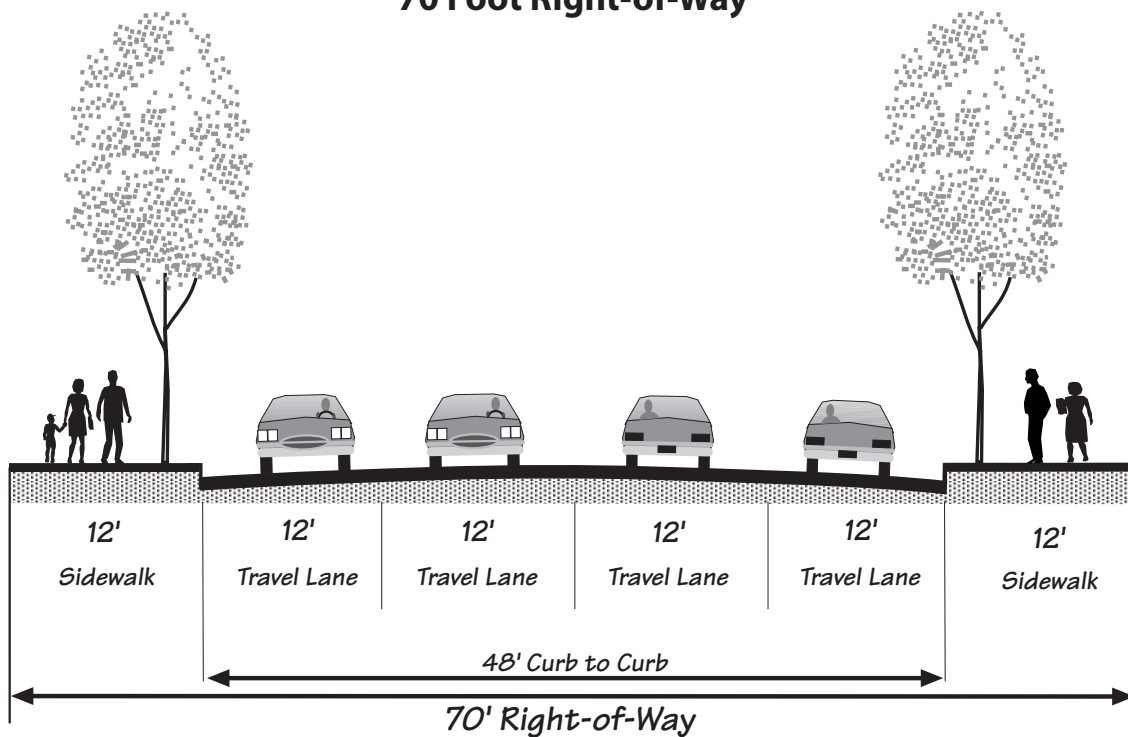


STANDARD STREET SECTIONS

**Lowell: Moody to Bond
62 Foot Right-of-Way
Looking East**

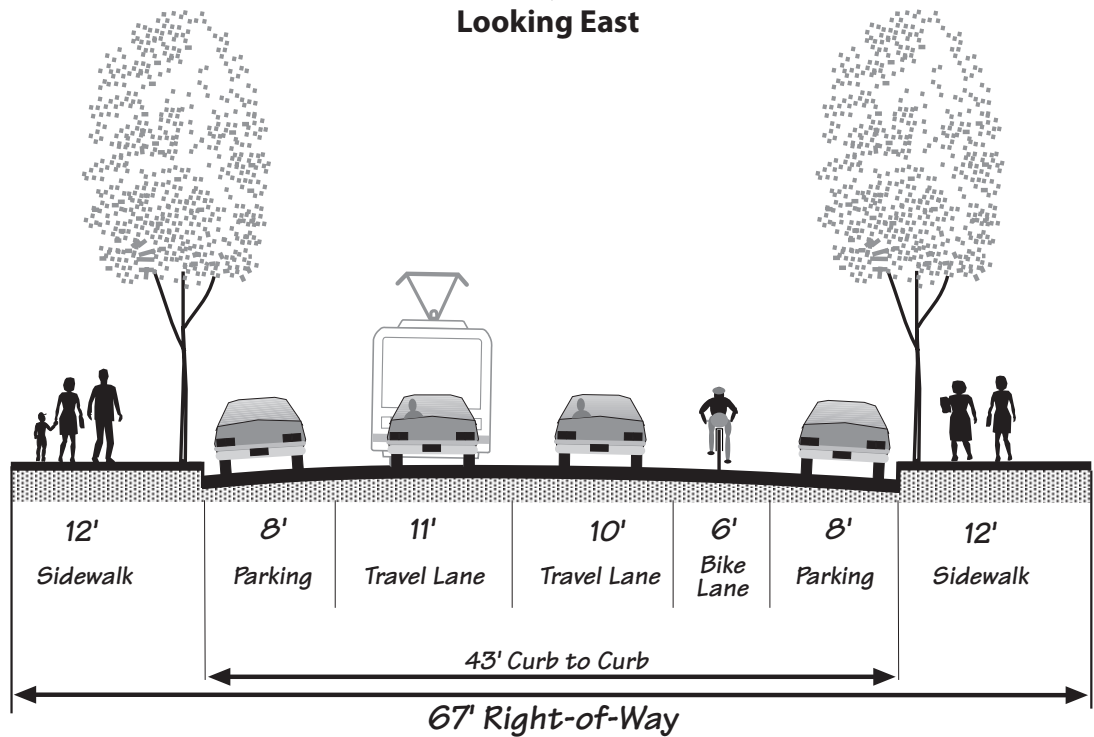


**Hamilton: Macadam to Moody
70 Foot Right-of-Way**

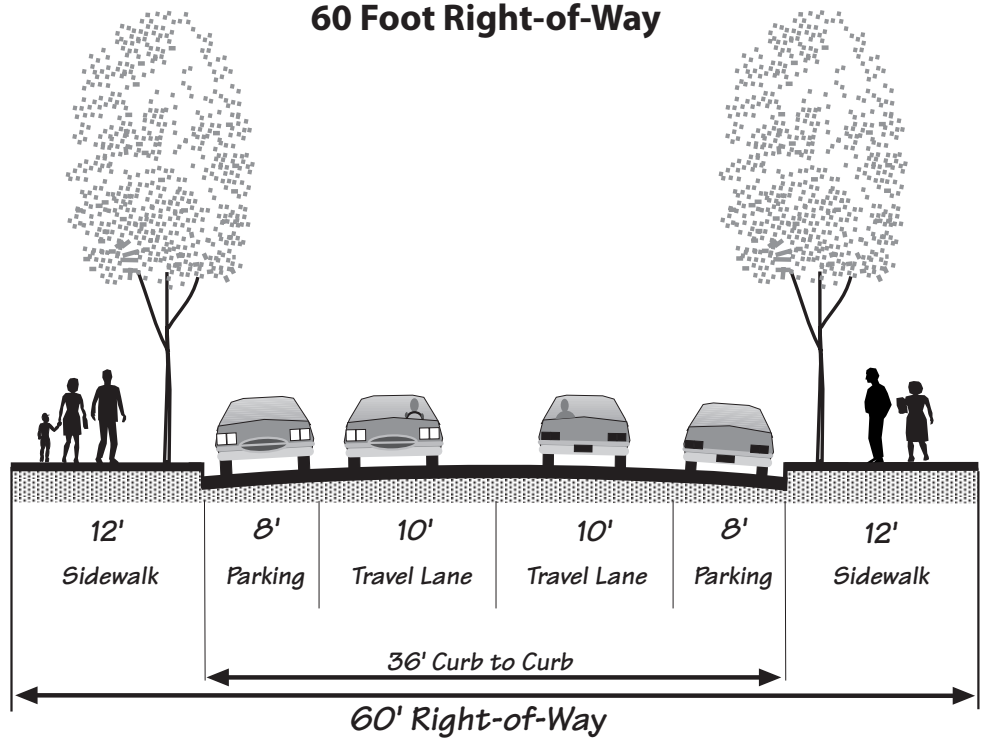


STANDARD STREET SECTIONS

Hamilton: Moody to Bond
67 Foot Right-of-Way (one-way eastbound)
Looking East

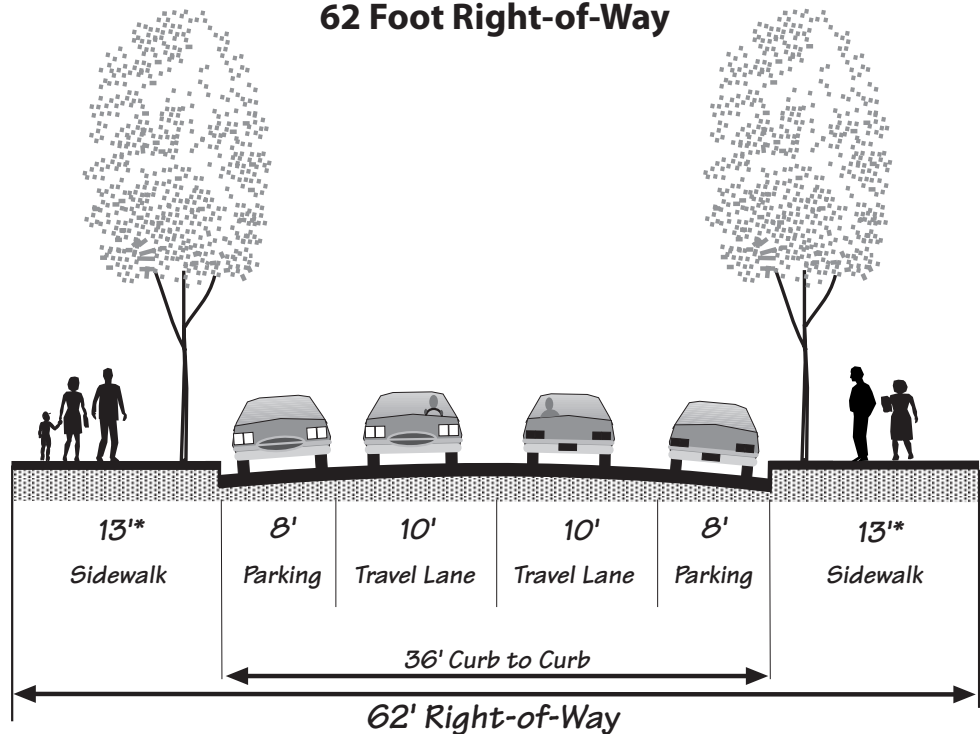


Local Streets
(Sheridan, Whitaker, Curry, Abernethy, Thomas, Lowell-east of Bond, Bancroft)
60 Foot Right-of-Way



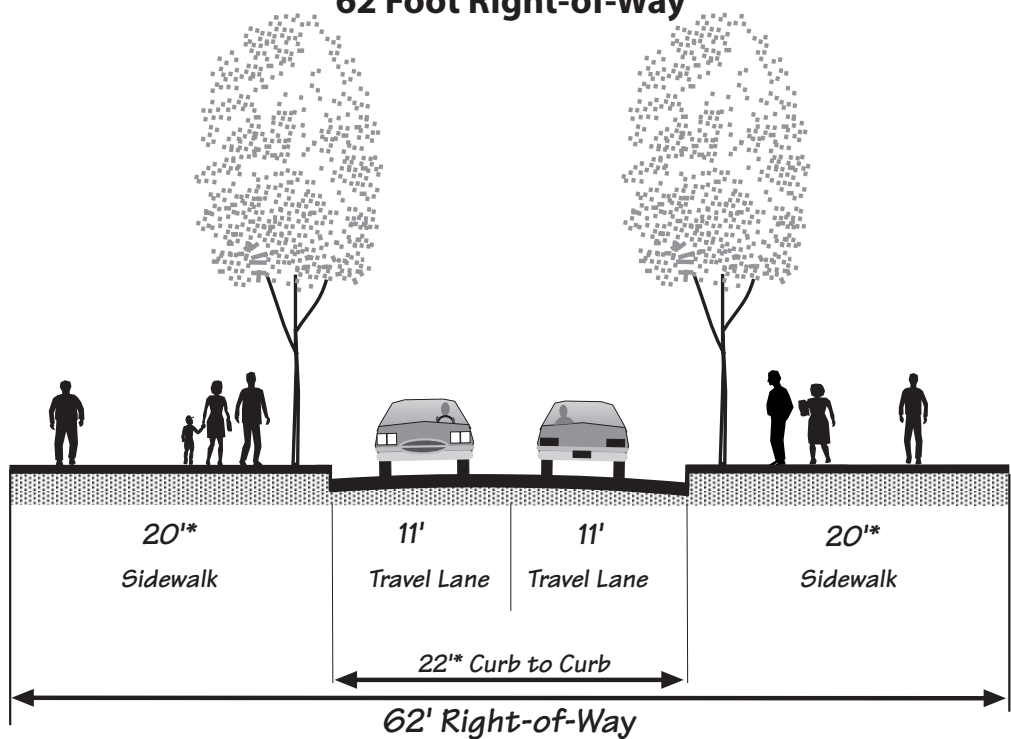
STANDARD STREET SECTIONS

Enhanced Pedestrian Streets
(Arthur, Meade, Gaines; excluding Grover)
62 Foot Right-of-Way



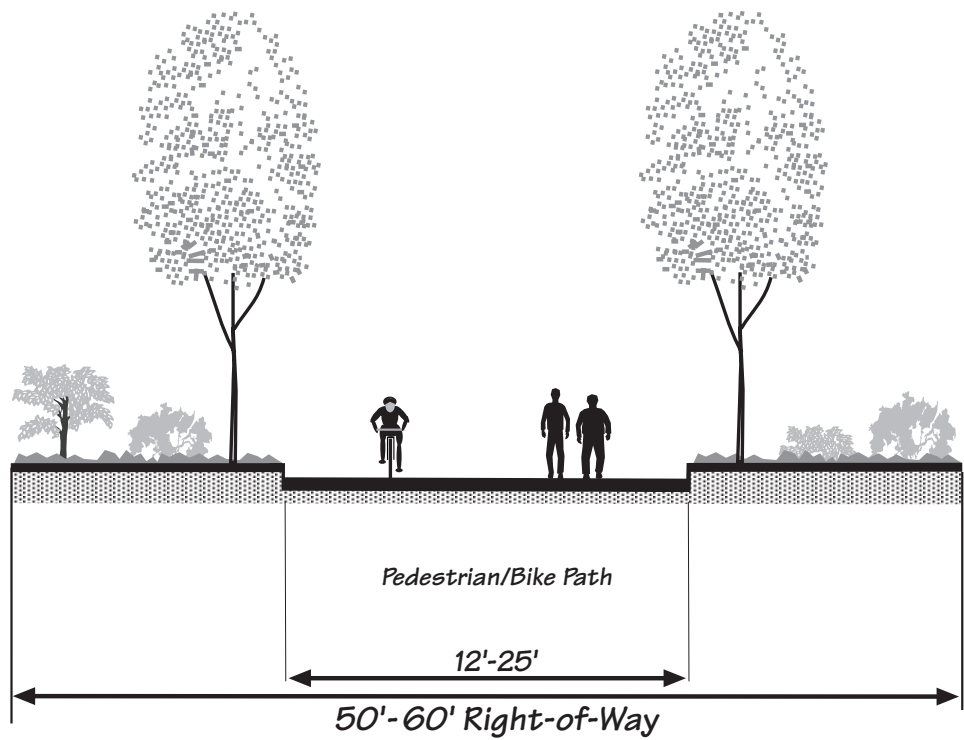
*Gaines: 12 foot sidewalks

Enhanced Pedestrian Streets at Intersections
62 Foot Right-of-Way



*Gaines: 24 foot streets/19 foot sidewalks

Greenway Access Connections
(Pennoyer, Lane, other GA extensions)



Note: Public access easement only (full width) with a minimum of 50% landscaping.

STREET TREES AND LANDSCAPE

The South Waterfront District presents a unique opportunity to create an entire urban forest. Species diversity and the emphasis of the South Waterfront District street tree plan build a healthy environment. Trees will be selected by the Urban Forest Manager that best support the environmental goals of the City. Trees will be selected that intercept and absorb runoff, particulates and pollutants and provide shade for buildings and pedestrians and provide fall color. The street tree plan will also encourage appropriate transitions from the public right-of-way to the Willamette Greenway and parks. In Greenway Access connections, native and native-like trees will be placed to complement the Greenway and parks, reinforcing the botanical connection between the River and the South Waterfront District.

Street trees with an open and spreading habit will be selected and sized to fit each right-of-way. Larger spreading trees in a uniform planting will be placed at the intersections of Enhanced Pedestrian Streets at River Parkway, Bond and Moody where more space is available. However, columnar trees are most appropriate when adjacent to the streetcar and light rail catenary system and will be placed in these locations as appropriate.

The special design areas on Bond, River Parkway and Gibbs at the Transit Hub provide opportunities to create distinct character and innovative solutions. Street tree concepts for open space and the public right-of-way could be integrated to avoid redundant plantings. Landscape areas should be distinctive and relative to the South Waterfront District.

Views to downtown, Marquam Hill and the River enhance the dynamic character of the District. Selected street trees will reinforce and frame near and long-distance views, especially to downtown, the Willamette River and beyond. Landscape and tree plantings in Greenway Access connections will also reinforce near and distant views of the Willamette River and Mount Hood.

Landscaping occurs at portals, Greenway Access connections and in sidewalk furnishing zones. Landscaping promotes vegetation in urban areas and contributes to the health and aesthetic quality of the City. It can also provide identity by unifying development and enhancing the streetscape. Environmentally, landscaping retains storm water runoff and provides cooling during summer months. Landscape areas can help restore natural plant communities by reestablishing native and native-like plants where the public right-of-way intersects with the Willamette Greenway or other natural areas.

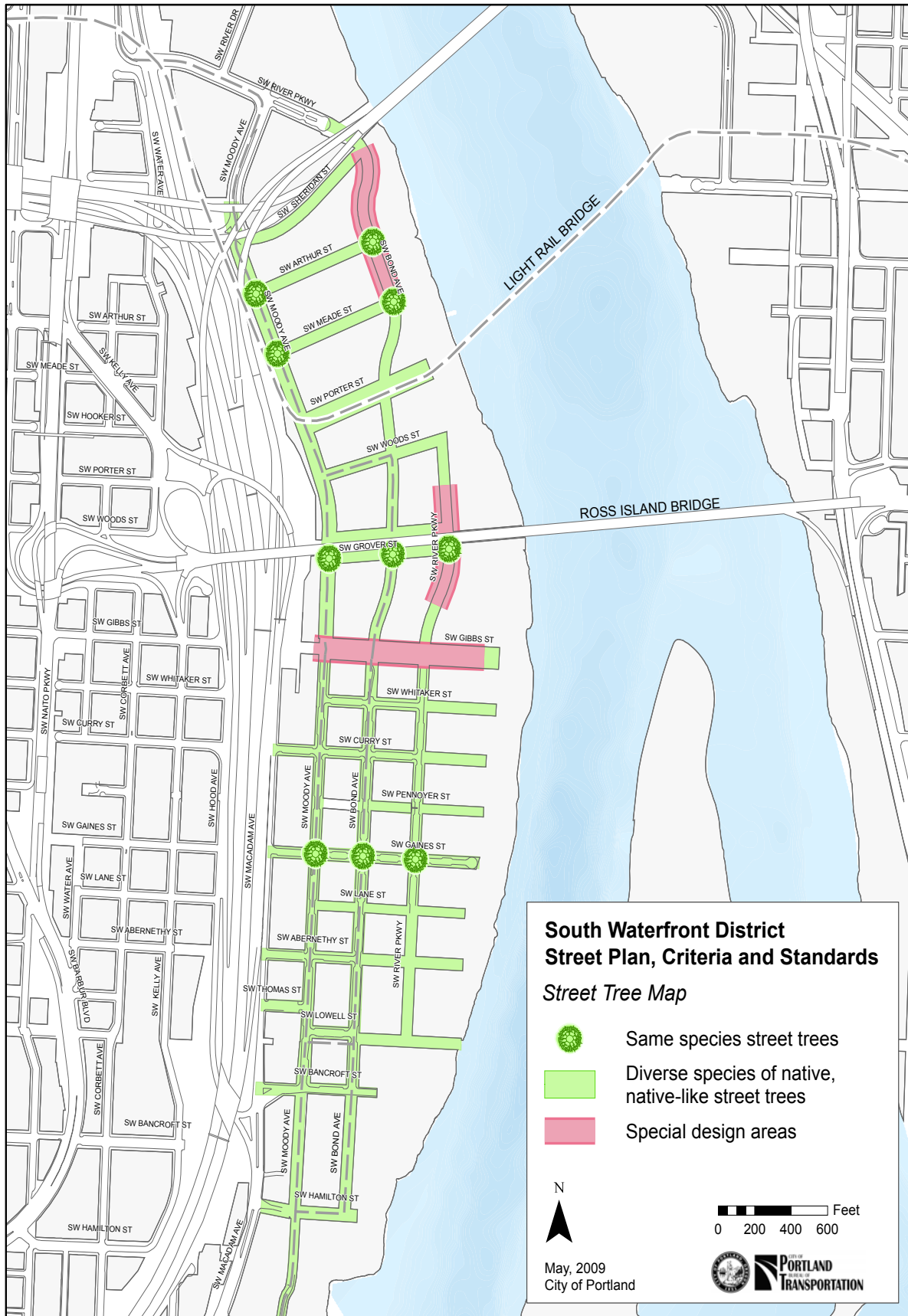
Special landscaping will be designed to enhance the identity of the District, its portals and connections to the Greenway. A full range of plant material shall be used with an emphasis on native and native-like varieties.

Many Greenway Access connections are an extension to the River of Enhanced Pedestrian Streets. All Greenway Access connections emphasize landscape and special design that reinforces the image of the South Waterfront District, the transition between buildings and public spaces and the connection from River Parkway to the Willamette Greenway. They contain a minimum of 50 percent landscaping within 100 feet of the Willamette River Greenway, providing opportunities for stormwater management. Native and native-like plant material including groundcovers, shrubs and trees will be used to create continuity with the Greenway. Lane and Pennoyer are also Greenway Access bike and pedestrian facilities from the Greenway to Moody, each containing a minimum of 50% landscaping.

Except at curb extensions, the sidewalk furnishing zone is a 4-5 foot planted strip that lies between the curb and pedestrian through zone. Curb extensions in special design areas and at Enhanced Pedestrian Streets will have larger planting areas in the furnishing zone. Planting areas in the furnishing zone will provide pervious area for stormwater management from sidewalk areas. Concrete unit pavers at car door locations provide a walking surface at on-street parking (referred to as carriage walks). Landscape plantings of low growing groundcovers or lawn would fill the furnishing zone between unit pavers and street trees.

At areas where high foot traffic is expected, cast iron tree gratings may be used in the furnishing zones along with concrete unit pavers, provided that additional planting area is incorporated at the curb extensions. An example of where this may be appropriate is in a location with a high level of anticipated automobile passenger loading and unloading activity between the curb and the building.

STREET TREES MAP



GREEN STREETS

The South Waterfront District presents a unique opportunity to implement a full scale Green Street approach in the Central City. Because the majority of streets will be newly constructed or significantly reconstructed, grades and elevations can be set to integrate the Green Street approach into the design at the outset. The soils and drainage should be particularly conducive to infiltration if contamination is not present and the underground utilities locations permit. In more constrained areas “flow through” stormwater facilities will still provide benefit in slowing and filtering stormwater.

Green Street facilities particularly appropriate for the South Waterfront District are the vegetated curb extension (which can be coupled with the pedestrian curb extension), vegetated infiltration basins and the stormwater sidewalk planter. Both facilities have been proven and tested in a variety of settings throughout Portland.

Restoring healthy urban watersheds and creating livable vibrant communities is a top priority of the City of Portland. Portland uses multi-objective approaches to achieve these ends. A Green Street is one example that helps to reduce impervious surfaces, replenish groundwater, treat and filter stormwater at its source while supporting regulatory compliance and enhancing watershed health. At the same time, because it is a vegetated system, it can help improve air quality and reduce air temperatures, increase urban green space and habitat, aesthetically improve the streetscape and surroundings, potentially increasing adjacent property values. These vegetated systems can also reduce the cost of underground infrastructure.

STREET LIGHTING

The South Waterfront District street lighting plan is a departure from other Central City districts where traditional twin and single Portland ornamental streetlights line the streets. The South Waterfront District offers an opportunity to use new fixture types within the Central City, incorporating the most current light design technology to provide necessary light control and efficiency in this mixed-use neighborhood. To address dark skies goals, the District street lighting fixtures minimize light pollution by directing the majority of their light downward to the street and sidewalk. In addition, the proposed induction lamps have a long service life of approximately 10 to 15 years.

Three street light fixture mounting methods provide the necessary lighting for the public right-of-way. Post top, streetcar strain pole and intersection pole mountings individually or in combination incorporate modern lighting technology to provide efficient and appropriately directed lighting.

Post top fixtures are pedestrian scale and located on all streets and Greenway Access connections in the District other than at intersections. The new mid-block lights enable the use of pedestrian-scale mounting heights, providing effective light distribution controls and contributing to the distinct character of the District. Flower pots may be added to poles through the use of a removable flower pot ring attachment.

The same street and accessway pole lighting would be used in privately owned Greenway Access connections and would be owned and maintained by the property owners. Post tops would also be found in the special design areas where appropriate. Corner poles use cylindrical area lights with QL induction lamps to light the sidewalk and intersection, as well as a canopy downlight to provide extra illumination to the corner sidewalk area.

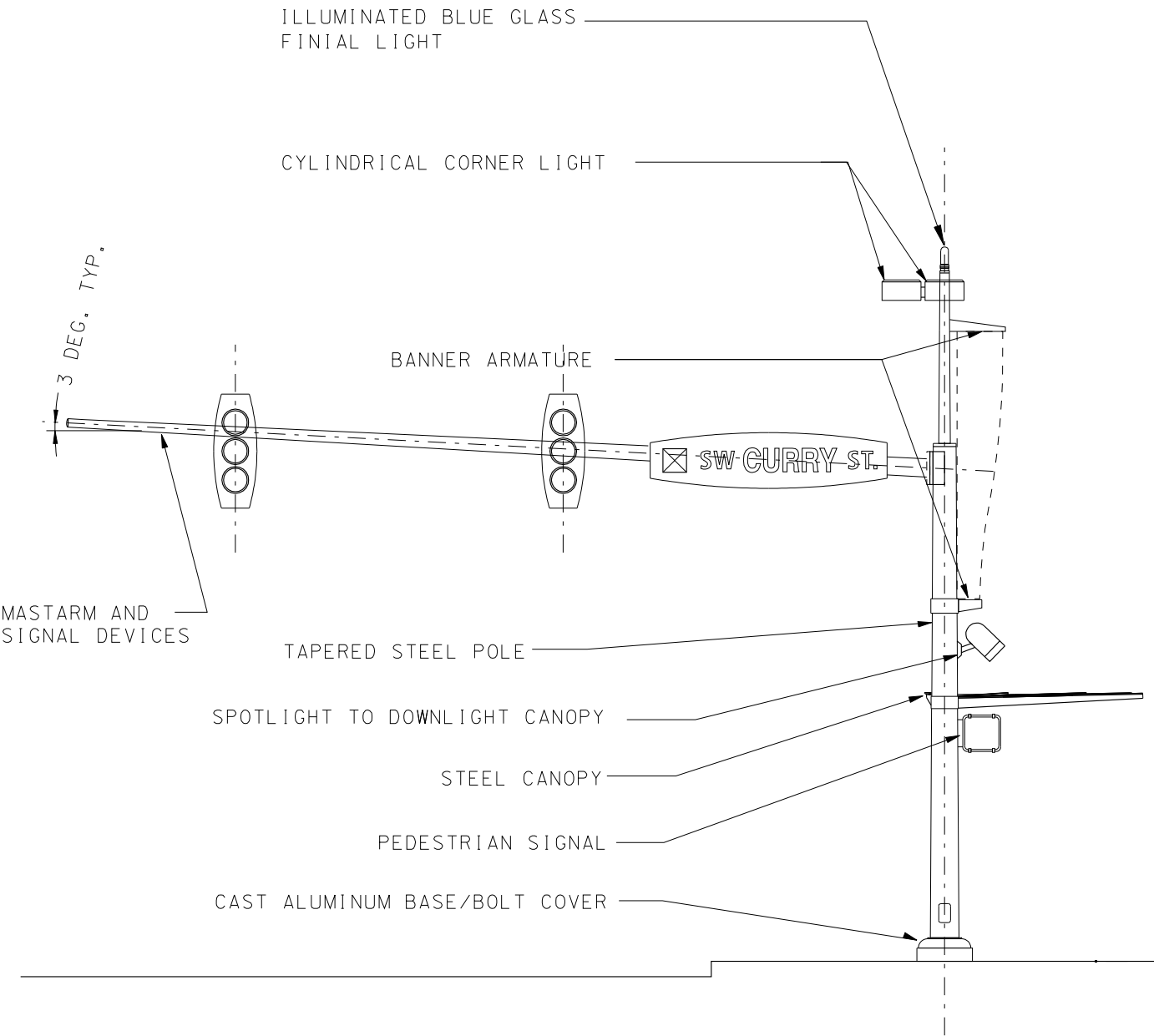
Corner lights use cylindrical area lights with 55 watt QL induction lamps to light the intersection and sidewalks. A translucent canopy is mounted over the sidewalk and downlit with a canopy light. For signalized intersections, District standard corner poles have been designed that combine lighting functions with traffic and pedestrian signal functions in a single pole to decrease pole clutter.

Light fixtures will be positioned across from one another with eight fixtures per block (four per block face: two corner poles plus two midblock poles). Light fixture locations may minimally vary because of the number of different block sizes and shapes within the District.

Bond and Moody are designated streetcar streets. Along the streetcar alignment, mid-block and corner light poles will be installed that are capable of supporting the Overhead Catenary System (OCS) attachments. The mid-block poles along the streetcar are a double-headed luminaire with an upgraded pole and foundation to bear the catenary wire support load requirements. Corner pole foundations are also upgraded to support the catenary load requirements, but will be of the same basic pole design as other corner poles in the District.

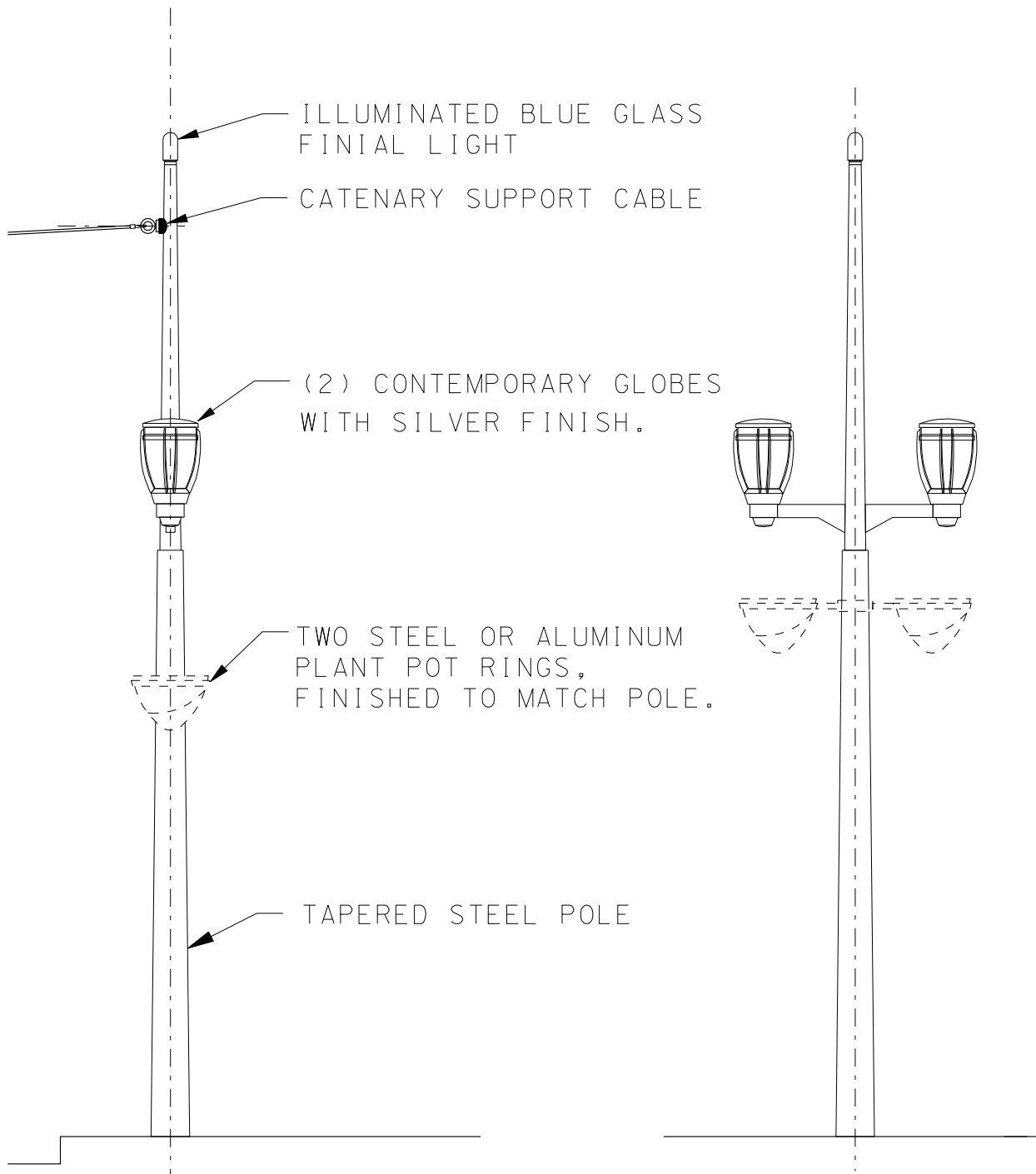
District standards combined catenary support/light poles will be utilized along the streetcar line, per Portland Streetcar Inc.'s planned streetcar track alignment. All efforts will be made to match up OCS support requirements with the District standard light pole locations to the degree possible. Supplemental poles for the streetcar catenary system may be needed at corners or at curves in the track, in addition to the combined OCS/street light poles. However, the pole size and quantity should be minimized as much as is possible.

STREET LIGHTING STANDARDS



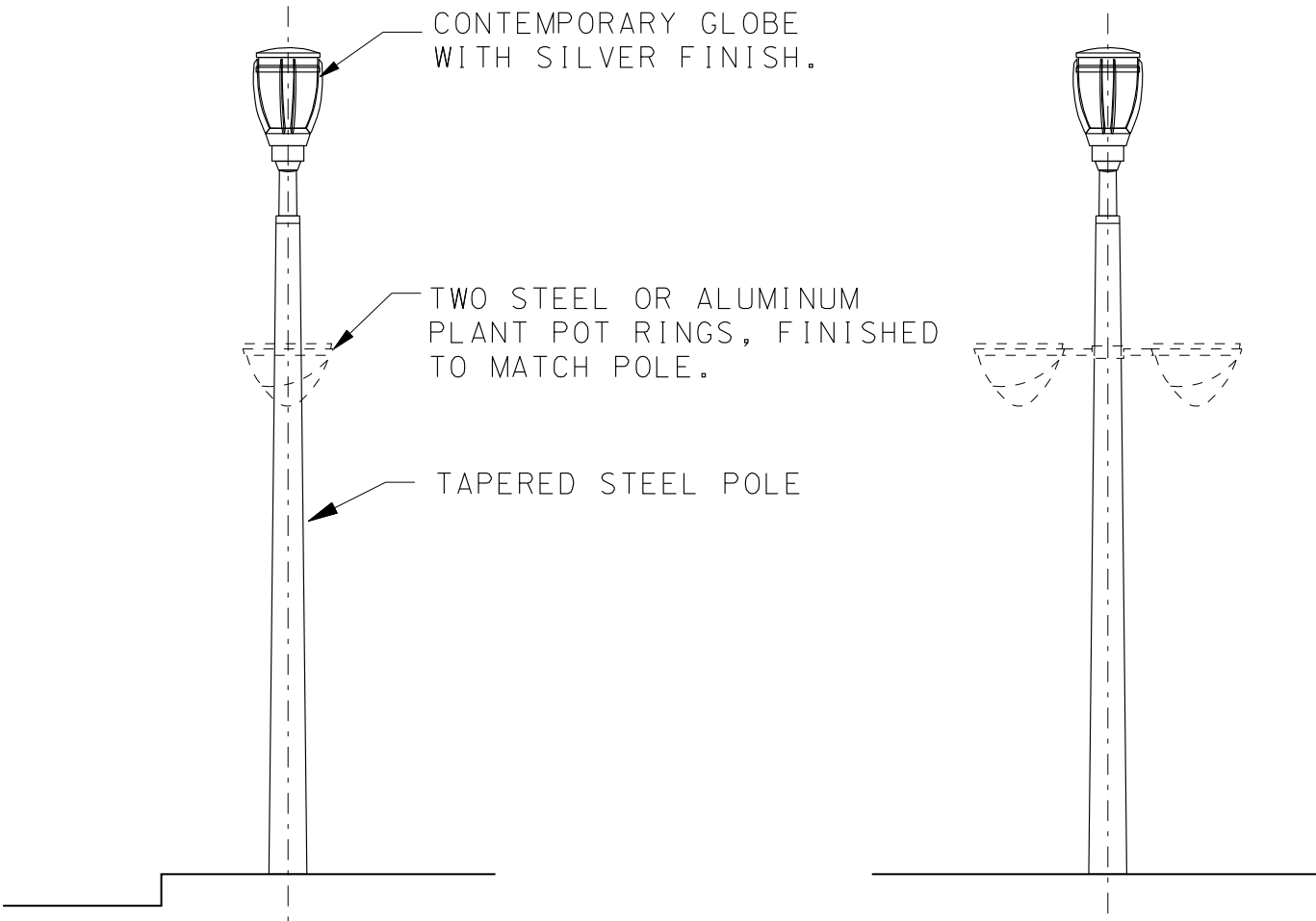
South Waterfront Corner Pole with Mastarm

STREET LIGHTING STANDARDS



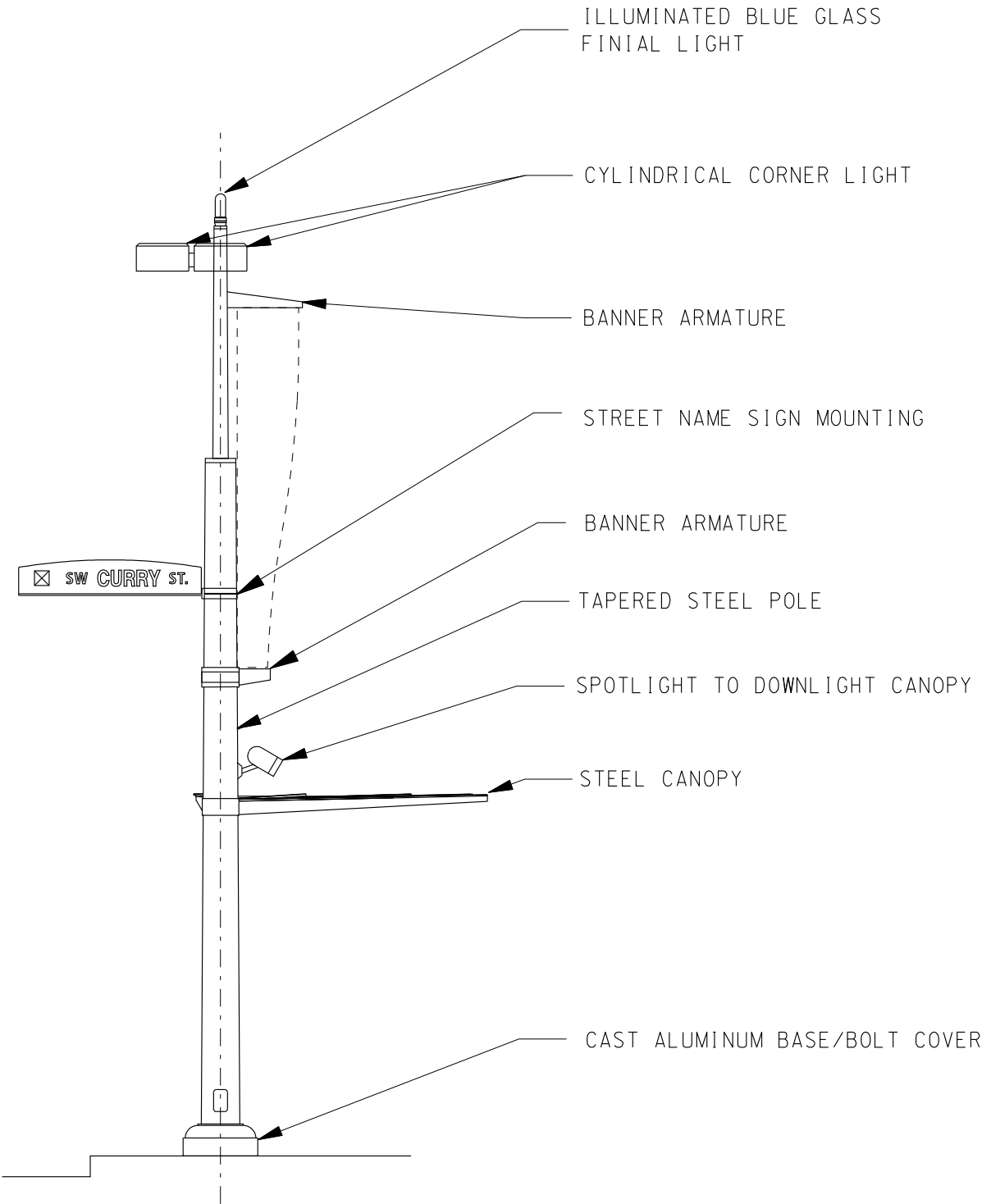
South Waterfront Mid Block Catenary Pole

STREET LIGHTING STANDARDS

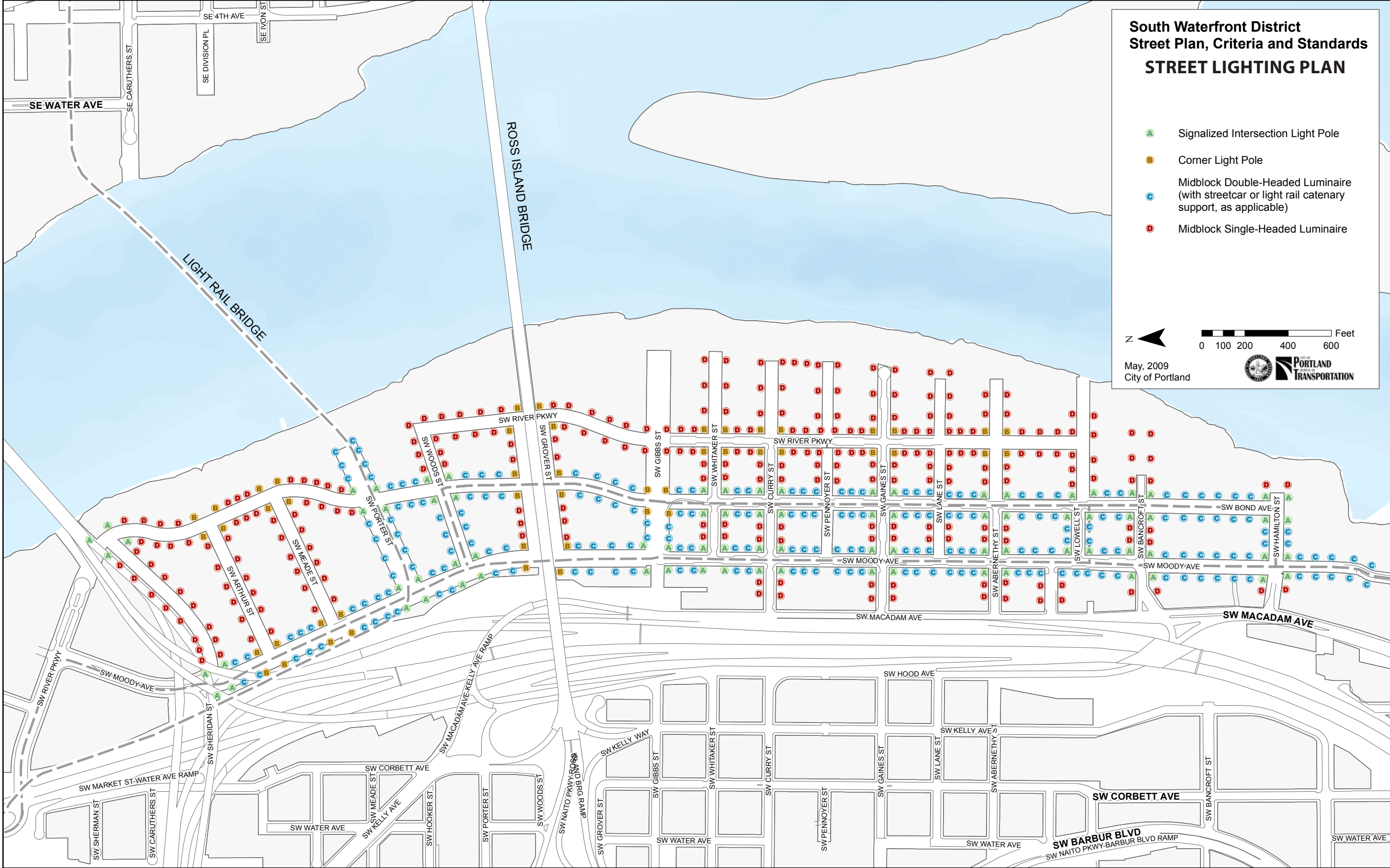


South Waterfront Post Top Pole

STREET LIGHTING STANDARDS



South Waterfront Corner Pole



PUBLIC RIGHT-OF-WAY PERFORMANCE CRITERIA AND STANDARDS

ELEMENTS	CRITERIA AND STANDARDS	
Automobile	Through Travel Lane	10-12 feet
	Left Turn Lane	10-13 feet
	Mixed Traffic Lane	11 feet minimum
	Curbside Parking	7-8 feet (width), 19 feet (length) min.
	Curbside Loading Zone	8 feet minimum
	Traffic Circles	The design engineer must refer to other sources and exercise professional judgement in the design of traffic circles.
Bicycles	Conform to Bicycle Master Plan striped 5' -6' lanes or 6' -7' with concrete gutter.	
	Public R.O.W.	0-7 racks per block in furnishing zone or as per direction of the City Engineer*
	Transit Hub	Six lockers and eight racks
	Bus Stop	One rack per stop in furnishing zone
	Bus Layovers Streetcar Stop	Based on Transit Service Strategy One rack per stop in furnishing zone or as per direction of the City Engineer. *Place racks outside of automobile door and trunk access paver pads in furnishing zone.
Transit	Conform to the TriMet Planning and Design for Transit, Section 3.	
	Streetcar Stop	40-foot tangent curb extension
Pedestrian Circulation	Sidewalks will be as wide as possible with 3' modules and defined furnishing, pedestrian through, curb and building frontage zones as indicated on South Waterfront District Standard Plans. Pavers: Unit pavers are required in the furnishing zones of all streets at automobile door and trunk access locations. Unit pavers are an alternative to landscape and cast-in-place concrete at Enhanced Pedestrian Intersection curb extensions. Unit pavers should be a Holland Stone rectangular and/or square module, laid in a Herringbone, Basket Weave or Random Blend pattern and may be applied only in the furnishing zone and in curb extensions at Enhanced Pedestrian Street intersections outside of pedestrian through zone. Unit pavers maybe used along the entire furnishing zone.	
	Sidewalk Materials	Cast-in-place concrete with medium broom finish. (See Detail SWD16)
	ADA Tactile Warning Strips	Color: Yellow
	Furnishing Zone	Holland Stone Concrete Units or approved equal. (See Detail SWD16)
	Cast Unit Paver Pattern	Interlocking patterns: Herringbone, Basket Weave, Random Blend. (See Detail SWD16)
	Color	Gray

PUBLIC RIGHT-OF-WAY PERFORMANCE CRITERIA AND STANDARDS

ELEMENTS	CRITERIA AND STANDARDS	
Pedestrian Circulation	<p>Approved Manufacturers</p> <p>Cast Unit Paver Pattern</p> <p>Color</p> <p>Approved Manufacturers</p> <p>Sidewalk Furnishing Zones Over Vaulted Basements</p>	<p>Holland Stone Concrete Units or approved equal. (See Detail SWD 16)</p> <p>Interlocking patterns: Herringbone, Basket Weave, Random Blend. (See Detail SWD 16)</p> <p>Gray</p> <p>Mutual Materials, Willamette Gray Stone, Western Interlock, Abbotsford, Westcon or approved equal.</p> <p>The furnishing zone may be paved with concrete (in lieu of unit pavers or landscaping) where the zone is over a vaulted basement. Street trees are still required with tree vaults - size to be determined through plan review. Tree well openings (pervious surface area above the tree vault) should be in the range of 4'x6', 4'x9', or 4'x12' subject to approval of the City Engineer. Intersections at Enhanced Pedestrian Streets should consist of cast-in-place concrete with a rake finish in the center and continuous scoring through the pedestrian crossing.</p>
Special Design Areas	<p>Designs for Special Design Areas as identified on the Concept Street Plan and Street Trees Map require initial approval by the City Engineer and review by the Design Commission and would be treated as a nonstandard improvement in the public right-of-way. Special Design Areas are intended to be collaboratively designed using a process that may involve Bureau of Parks, PDC, PBOT, BES, BPS, BDS, the designers and other selected City and private property representatives.</p> <p>The primary objectives of the Special Design Areas are to:</p> <ul style="list-style-type: none"> • Create an exemplary open space network that exceeds minimal requirements while meeting community objectives in a creative, functional and ecological fashion. • Strive for high-quality planning, design, construction, and maintenance of parks, open space and transit improvements. <p>Should private development occur prior to implementation of a special design process, the standards in this document will apply.</p>	
Street Lighting	<p>Enhance and promote the Marine/Industrial image and identity while providing a "controllable" light that won't over-light view corridors, greenway and 2nd/3rd story residences. A new light fixture will be utilized throughout the District. Mounting method will be post-top in the mid-block locations and cylindrical, arm mounted lights at the intersection. Light fixtures will be opposed with 8 fixtures per typical 200-foot block. All hand holes and "pull boxes" should be located within the furnishing zone and aligned with the concrete scoring pattern. If catenary and street light poles are not combined, 10 foot space (minimum) will be required between the street light and catenary pole.</p>	

PUBLIC RIGHT-OF-WAY PERFORMANCE CRITERIA AND STANDARDS

ELEMENTS	CRITERIA AND STANDARDS	
Street Lighting	The non-standard components included in the street lights within the South Waterfront will require additional City maintenance. Therefore, the developer will pay a premium to the City for perpetual maintenance of these non-standard components as part of the permitting process. The maintenance fee of \$9,000 per entire block will be a one-time, non-adjustable fee covering the City's maintenance obligations after the 2 year warranty period.	
	Pole	Silver
	Corners	Corner light poles are to be used in conjunction with district portal gateway features such as landscaping, pylons with public art installations. Corner light poles shall occur in City of Portland right-of-way or on private property. Portal light poles on private property would be owned and maintained by the property owner.
	Post Top	Contemporary Globe with top reflector and house shield and induction lamp. Finish to be standard silver metallic.
	Corner Poles	55 watt QL induction lamp and house side shield. Finish to be silver.
	Combined Catenary/Light Pole	Contemporary Globe with top reflector and house shield and induction lamp. Finish to be silver.
	Private Street and Accessway Lighting	Street lights in private accessways with public easements will be owned and maintained by property owners.
	Special Design Areas	District standard street light selections in Special DesignAreas will be determined during Design Review per any non-standard improvements in public right-of-way.
Private Utilities	All vault lids, access holes and other utility components should be located in the furnishing zone. All vault and manhole covers must be flush with the walking surface and skid resistant.	
	Underground Utilities:	A utility corridor in a common trench should be provided on all streets. Vault lids and access holes should be aligned with concrete paving patterns. Sawcutting should occur along score lines when repairing or adding utility services.
Public Utilities	All vault lids, access holes and other utility components should be located in the furnishing zone. All vault and manhole covers must be flush with the walking surface and skid resistant.	
	Sewer and Water	Consult the Water Bureau and BES for applicable standards for all streets especially on streetcar/ rail streets. Vault lids and access holes should be aligned with concrete paving patterns. Sawcutting should occur along score lines when repairing or adding utility services.

PUBLIC RIGHT-OF-WAY PERFORMANCE CRITERIA AND STANDARDS

ELEMENTS	CRITERIA AND STANDARDS							
Street Trees and Landscaping Street Trees	<p>Street trees reinforce the function, right-of-way width and character of each street type. Trees should be of an open habit and of diverse species. Use autumn color as a design feature on Enhanced Pedestrian Streets.</p> <p>Specific tree species and sizes shall be reviewed and approved by the Urban Forest Manager. Same species of larger spreading trees shall be installed at Enhanced Pedestrian Street intersections (four per corner). Diverse street tree plantings of native and native-like (cultivars and hybrid varieties of native species) trees shall occur between same species plantings and on all other streets and applicable accessways.</p> <p>Minimum street tree spacing should be 18-20 feet on center. Spacing shall be consistent with the growth and spread of actual species and based on a 3-foot module. The street tree crown shall not be in conflict with structures (bridges, poles or other structures in the public right-of-way).</p> <p>Minimum street tree spacing at a streetlight should be 15 feet from the center line of the tree to the center line of the light pole. (Detail SWD 17, 18). Spacing shall be consistent with the growth and spread of actual species. The intent of this design criteria is to maximize the number of trees per block.</p> <p>A 15 foot space (minimum) will be required between the street tree and combined catenary/streetlight pole.</p> <p>Trees adjacent to streetcar operation should be columnar or as approved by the City Forester.</p> <p>Street trees should be at least 3-1/2 inch caliper at installation for public streets.</p> <p>Street trees shall be Ball and Burlap, no “Bag Trees”.</p> <table><tr><td>R.O.W. Width</td><td>Canopy Diameter</td></tr><tr><td>70 to 80 Foot R.O.W.</td><td>30 - 35 Feet</td></tr><tr><td>60/68 Foot R.O.W.</td><td>25 Feet*</td></tr></table> <p>*Larger spreading tree selections for Enhanced Pedestrian Street intersections shall be reviewed by the City Forester.</p> <p>The design of the public right-of-way should be integrated with adjacent parks, Willamette Greenway or other public projects, as indicated by Special Design Area designations. Special Design areas will be relocated if proposed public project areas are relocated.</p>		R.O.W. Width	Canopy Diameter	70 to 80 Foot R.O.W.	30 - 35 Feet	60/68 Foot R.O.W.	25 Feet*
R.O.W. Width	Canopy Diameter							
70 to 80 Foot R.O.W.	30 - 35 Feet							
60/68 Foot R.O.W.	25 Feet*							
Street Trees and Landscaping	Landscaping	Landscaping within the public right-of-way occurs at portals, medians, accessways, traffic circles and in the sidewalk furnishing zone. Landscaping promotes vegetation in urban areas and contributes to the health and aesthetic quality of the City. It can also provide identity by unifying development and enhancing the public right-of-way. Environmentally, landscaping retains storm water runoff and provides cooling during summer months. Landscape areas can help restore natural plant communities through reestablishing native and native-like plants where the public right-of-way intersects with the Willamette Greenway or other natural areas. Landscape plantings will promote native and native-like plants (cultivars and hybrid varieties of native species) that help absorb stormwater and maintain porous surfaces.						

PUBLIC RIGHT-OF-WAY PERFORMANCE CRITERIA AND STANDARDS

ELEMENTS	CRITERIA AND STANDARDS	
Street Trees and Landscaping	Maintenance	Maintenance of plantings, landscape materials and irrigation in the public right-of-way will be performed by the adjacent property owner.
	Portals	Special landscaping shall be designed to enhance the identity of district portals. A full range of plant material should be used with an emphasis on native and native-like varieties.
	Green Access Connections	Green Access connections contain a minimum 50 percent landscaping of defined surface area within the right-of-way and within 100 feet of the Willamette River Greenway providing innovative opportunities for stormwater management. Where Greenway Accesses extend west into the District, landscape plantings of native and native-like plant materials shall occupy a minimum of 50% of the surface area within the right-of-way. Native and native-like plant material including groundcovers, shrubs and trees shall be used to create continuity with the Greenway.
	Sidewalk Furnishing Zone	The sidewalk furnishing zone is a 4 to 5 foot planted strip (except at curb extensions) that lies between the curb and pedestrian through zone. Concrete unit pavers at car door locations, street trees, bike racks, parking meters, street lights and regulatory signage should be located in this zone. Pavers may be utilized with curb extensions at Enhanced Pedestrian Streets. Concrete pavement or unit pavers will be located and centered at loading zones on Local Streets. Landscape plantings should consist of low growing shrubs, perennials, groundcovers or lawn and promote stormwater absorption.
	Sidewalk Furnishing Zones Over Vaulted Basements	The furnishing zone may be paved with concrete (in lieu of unit pavers or landscaping) where the zone is over a vaulted basement. Street trees are still required with tree vaults - size to be determined through plan review. Tree well openings (pervious surface area above the tree vault) should be in the range of 4'x6', 4'x9' or 4'x12' subject to approval of the City Engineer.
	Green Streets	Vegetated stormwater facilities occur throughout the district in the form of curb extensions or stormwater sidewalk planters. Designs include layered plantings that achieve stormwater management goals and integrate with ground floor uses such as cafes, restaurants, shops and residential frontages.

PUBLIC RIGHT-OF-WAY PERFORMANCE CRITERIA AND STANDARDS

ELEMENTS	CRITERIA AND STANDARDS	
Public Art	Include artists in projects at the onset utilizing the City's 2 percent for art program. Consult with the Regional Arts and Culture Council (RACC) to integrate works of art into the public right-of-way. Potential sites or projects might include portal and gateway design, pedestrian streets, special intersections and accessways, special streetscape features and design near neighborhood parks, street furnishings, traffic circles, bollards, street signs, inlays, stormwater features, and manhole covers.	
Street Furniture	The intent is to have consistency of standards throughout the entire district for all street furniture. Maintenance of these furniture amenities (benches, trash receptacles, banners, bollards, etc.) would be required of the adjacent property owner.	
	Benches	Landscape Forms "Austin" series or approved equal. Subject to revocable permit review.
	Trash Receptacles	Landscape Forms "Austin" series or approved equal. Subject to revocable permit review.
	Street Name Signs	Street name signs are to be specific to the South Waterfront District in color and shape. The sign panel is to be a truncated ellipse (curved at top and bottom, straight on each end) no more than 7'-0" in length, either flag mounted or mounted to the mast arm at a location nearest the vertical pole. The background is to be charcoal grey, the text is to be white. Text sizes and layouts are to follow the City of Portland standards.
	Banners	As approved by Signals/Street Lighting Division of the City of Portland's Bureau of Transportation System Management.
	Bollards	Standard Precast Bollard: Architectural Area Lighting (AAL) #CB18R-36 with cutoff grill, flat top and metal halide lamp.
Constructability and Maintenance	Align paving patterns that allow ease of access and minimize sawcuts necessary for utilities, maintenance and repairs.	

PROCESS TO MODIFY STREET STANDARDS

One of the guiding principles behind development of street standards for an entire district is that they remain consistent over time and throughout the area. This process allows for a uniformity of the look and character of the street network and helps give a unique identity to the area. Given the interest expressed by some in the use of pervious paving materials and other nonstandard treatments for this District it might be desirable to modify the adopted standards.

Any modifications made to South Waterfront District street standards would apply to the entire district, and not just an individual project or development. There would be a limited number of circumstances under which the street standards for this district would be modified. In all cases, modifications or changes to the street standards would fall within the purview of the City Engineer.

When applying the Street Standards the City Engineer may identify a need for correction or clarification to the drawings or text. The Street Standards may be updated to account for any needed corrections or clarifications at the discretion of the City Engineer. If such correction or clarification does not change the look or intent of the Street Standards, the City Engineer may modify the Street Standards to provide the required clarity.

Similarly, if there is a request for a change in District standards that would alter construction means or methods, without altering the “look” of the streetscape, then the decision for change in a standard would fall within the purview of the City Engineer. Such requests would be reviewed against current practices and evaluated for their impact and their success in meeting all of the City’s various goals and district plan and design principles.

The third instance would be due to a modification in the City’s standard specifications, such as a materials change resulting from emerging/new technology. This approval requires the City Engineer with advice from the Design Commission.

If a significant change in standards citywide is directed by the City Engineer, then PDOT would need an administrative review of all the district-specific standards (Lloyd, River and South Waterfront). The design review process would involve Bureau of Parks, PDC, PBOT, BES, BPS, BDS, the designers and other selected City and private property representatives and would include briefing the Design Commission. The purpose of the review would be to identify and correct any items in the district-specific standards which would be in conflict with the new standard or standards being adopted citywide.

If the request for change in a standard affects the “look” of the streetscape, it must be evaluated by the City Engineer for technical merit. If the City Engineer supports the change upon completion of the evaluation, the modifications will be subject to Design Review as per any nonstandard improvements in the public right-of-way. The North Macadam Urban Renewal Advisory Committee, the neighborhood association, and all other interested parties may provide input/testimony to the public Design Review process.

PROCESS TO MODIFY THE STREET PLAN

The South Waterfront District Street Plan reflects the vision, policy and regulations adopted by City Council in the South Waterfront Plan and Zoning Code. Over time, the development proposals in the District may trigger street plan modification requests, either by property owners or other government agencies. Such requests will be considered through the process described below, and may result in changes to the street plan.

This section describes the process through which modification requests that are generally consistent with the Street Plan can be considered and granted. Requests that modify street classifications and functions, downgrade connectivity, or are generally inconsistent with District transportation policies and objectives may require a Comprehensive Plan amendment.

As with any street plan, modifications are not undertaken lightly and may involve significant staff time and resources. Provided funding for a modification process is available, modification requests shall be submitted to the City Engineer describing the proposed modification and responding to the three criteria listed below. The request shall describe why the modification is better than the existing Street Plan.

Upon receipt, the City Engineer will review the request, using the criteria below to determine whether the request is consistent with the South Waterfront Plan and South Waterfront District Street Plan, Criteria, and Standards. Upon completion of this review, the City Engineer will issue a recommendation. The City Engineer may request an additional public review and comment prior to final approval.

PROCEDURES

The criteria to be used for reviewing street plan modification requests are the following:

- A. Consistency with the Street Plan Principles for the South Waterfront District Street Plan, Criteria, and Standards (Pages 9-10).
- B. Consistency with the Design Principles for the South Waterfront Street Plan, Criteria, and Standards (Pages 11-13).
- C. Consistency with the South Waterfront Plan Vision and Transportation Policy and Objectives, adopted by City Council on December 14, 2002.

APPENDIX

Items of interest to some of the Standards Committee 2003 Technical Advisory Committee members that were not able to be incorporated in the Street Standards document include:

Development of street standards for Macadam Avenue: A project to create standards for Macadam Avenue is broader in scope and process than what PBOT was directed to complete. Macadam is a state highway, and development of a unifying “look” and establishment of standards would require the support of ODOT and adjoining neighborhoods and stakeholders along its entire length. It is the recommendation of the Land Use/Transportation Advisory Committee that an action plan be created to develop standards for Macadam Avenue between Bancroft and Gibbs as an implementation effort for the South Waterfront District.

Use of sand-set pavers as a pavement option throughout the sidewalk area: The Standards Committee was not supportive of a broad application of pavers in District sidewalks for several reasons. From an urban design/aesthetic point of view, it was the Committee’s belief that the streetscape in the District should respect the marine/industrial history of the area. They had strong concerns that use of pavers throughout the sidewalk area would create a finer texture and level of detail than would be appropriate. Also, the increased cost of paver installation contributed to their decision to allow them as an option in limited areas only.

Inclusion of pervious paving materials other than sand-set pavers in the sidewalk area: At this time, the only pervious pavement approved for use in City right-of-way is sand-set pavers. It has been suggested that the standards provide opportunities for use of pervious paving materials other than sand-set pavers. BES and Portland Bureau of Transportation are planning to test some other pervious paving materials over the next year or so. Should the City Engineer determine one or more of them to be acceptable for use in the right-of-way, the standards could be revised in the process described in the procedures section. Issues surrounding installation costs, long-term maintenance, and possible alteration of the “look” of the streets would need to be addressed.

Use of single, diagonal curb ramps at street corners: The City’s Pedestrian Design Guidelines identify use of two ramps at street corners as the recommended standard. This is currently what is required when constructing City street corners. A diagonal ramp at an intersection is not desired, in part, because it directs pedestrians out toward the vehicular travel path.

POLICIES AND PLANS

The following are applicable background policy documents that support the South Waterfront District Street Plan, Criteria and Standards.

Bicycle Master Plan: This citywide plan describes the purpose and extent of bike facilities within the public right-of-way and provides standards for constructing improvements.

Central City Plan: This plan outlines the vision, goals and objectives for the Central City. It also contains specific actions and policies that pertain to the South Waterfront District. The Central City Plan is part of the Comprehensive Plan.

Central City Transportation Management Plan (CCTMP): This document describes general policies, classifications and functions of streets within the Central City. The CCTMP is part of the comprehensive Plan.

City of Portland Standard Construction Specifications: This document provides approved specifications and roadway details for street improvements within the public right-of-way.

Comprehensive Plan: The City of Portland's Comprehensive Plan includes Goals, Policies, Objectives and a Plan Map to guide the future development and redevelopment of the City.

Design Guide for Public Street Improvements: This Portland Office of Transportation handbook provides the design guidelines for public street improvements to help in preparation of construction documents for public street improvements within the City of Portland.

Green Street Policy: Adopted in April 2007 (resolution 36500) calls for widespread implementation of green streets.

Marquam Hill Plan Design Guidelines: The 2002 design guidelines address issues specific to the Marquam Hill Design District. Generally, proposals in the Marquam Hill Design District will be reviewed through the Type II procedure. These design guidelines will be the approved criteria.

North Macadam District Framework Plan: The Framework Plan, accepted by City Council August 11, 1999, defines the goals, objectives and overall vision intended to guide the redevelopment of the North Macadam District. It also describes an implementation strategy which proposes: (i) actions to be undertaken by the public and private sectors to achieve the vision and (ii) conceptual amendments to the City's Comprehensive Plan and development code to support the vision.

North Macadam Transportation Development Strategy: The strategy, adopted by City Council April 8, 2009, lays out a plan for multi-modal transportation projects to accommodate future development within the North Macadam Urban Renewal Area.

Pedestrian Master Plan: This citywide plan provides minimum sidewalk and access way requirements; goals, policies and objectives.

Planning and Design for Transit Handbook: This handbook provides guidelines for implementing transit supportive development.

Portland Pedestrian Design Guide: The guide integrates the wide range of transportation design criteria and practices into a set of standards and guidelines that promotes an environment conducive to walking.

Portland Zoning Code: Title 33 of the City Code, is intended to implement Portland's Comprehensive Plan and related land use plans in a manner which protects the health, safety and general welfare of the citizens of Portland. It describes the land use regulations subject to land use development. The South Waterfront sub-district portion of the Zoning Code contains supplemental regulations specific to the South Waterfront Plan District.

Proposed Neighborhood Corbett-Terwilliger-Lair Hill Plan: The 1997 proposed plan addresses transportation, housing, land use urban design, community services, natural, recreational and cultural resources and public safety.

Recommended North Macadam Design Guidelines and Greenway Design Guidelines for North Macadam: This 2002 document establishes guidelines for district-specific design issues, supplements the Central City fundamental Design Guidelines and applies to all development proposals in North Macadam within the design overlay zone.

Right-of-Way Related Documents: Applicable documents contain necessary technical design information. The extent to which these documents apply to any specific project may vary depending upon the project scope.

Scenic Resources Protection Plan: This plan, intended to preserve significant scenic resources, contains policy language, zoning regulations and maps that direct and regulate actions to protect and enhance designated scenic resources.

South Portal Study: The 2007 plan outlines the recommended improvements needed to the district's south portal, currently the Macadam Ave/ Bancroft intersection, to provide adequate capacity and improve safety.

South Waterfront District Transportation Improvements Evaluation: Prepared in 2004, this document focuses on improvements to Macadam Ave between Bancroft St and the I-5 on-ramp.

South Waterfront Plan: The 2003 South Waterfront Plan describes the City's goals and desired actions to guide development in the South Waterfront Plan District according to the vision established in the North Macadam District Framework Plan through implementing actions by multiple City bureaus.

Southwest Community Plan: This plan, along with a Comprehensive Plan/zoning map, guides land use, transportation and public service strategies in the plan area.

Stormwater Management Manual: This City of Portland Environmental Services manual outlines the City's stormwater management requirements and identifies who must conform to these requirements.

Willamette River Greenway Plan: The Willamette River Greenway Plan guides improvements along the river banks. Streets and accessways within the South Waterfront District would be subject to requirements and policies of this plan. The Willamette River Greenway Plan is intended to implement State Goal 15 of the Oregon Land Use Goals.

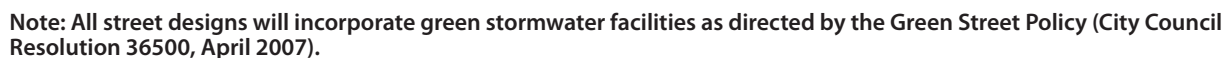
Urban Forestry Management Plan: This plan provides a comprehensive and multi-objective management plan for Portland's urban forest, consistent with various city, state and federal goals and regulations. OTHER RELATED DOCUMENTS Other adopted or accepted documents provide general information that may be useful for plans and permit applications.

Zoning Code for South Waterfront: The zoning code provides land use regulations that include development standards regulating building heights and form, floor area ratios, building setbacks, greenway standards and parking ratios and access limitations.

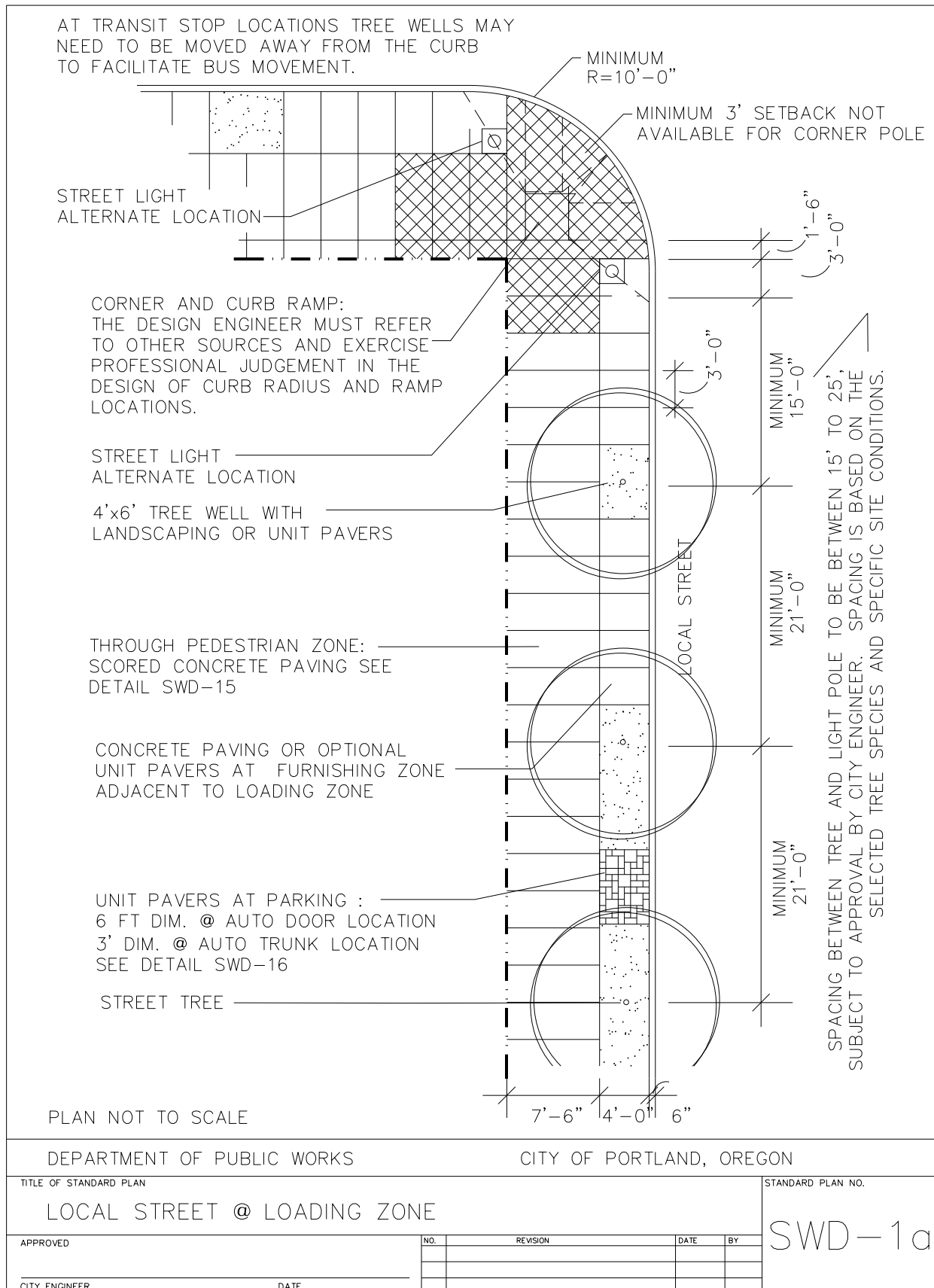
STANDARD PLANS

These plans are supplemental to the City of Portland Standard Construction Specifications. Refer to those specifications for additional required information.

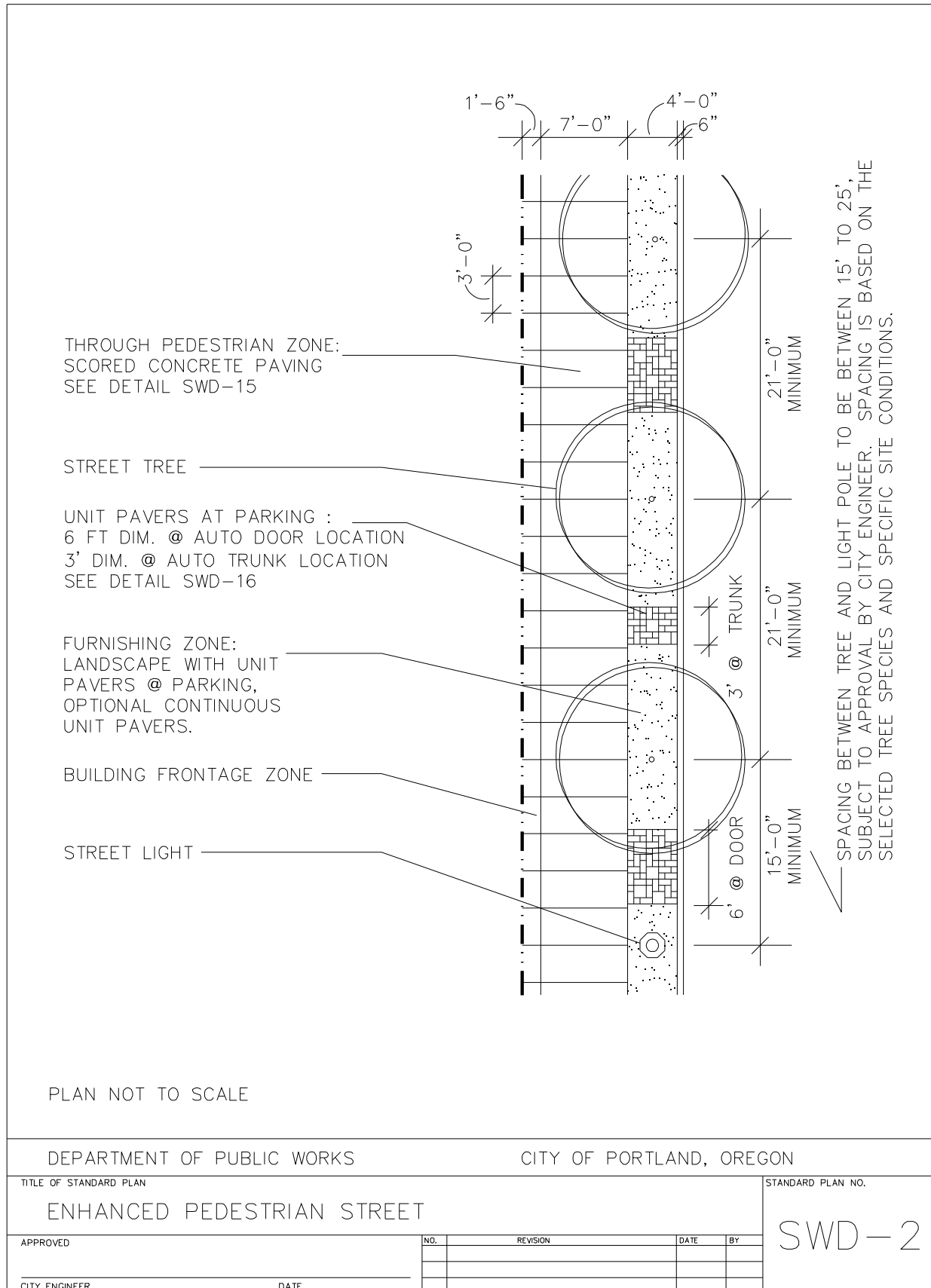
PLAN NO.	CONTENTS
SWD 1	Local Street
SWD 1a	Local Street at a Loading Zone
SWD 2	Enhanced Pedestrian Street
SWD 3	Enhanced Pedestrian Street at Intersection
SWD 4	River Parkway: Porter to Lowell
SWD 5	River Parkway at an Enhanced Pedestrian Street
SWD 6	River Parkway at an Enhanced Pedestrian Street Intersection
SWD 7	River Parkway at a Park - 1
SWD 8	River Parkway at a Park - 2
SWD 9	Bond at a Local Street
SWD 10	Bond at Enhanced Pedestrian Street Intersection
SWD 11	Bond at Enhanced Pedestrian Streets with Farside Bus Stop
SWD 12	Moody With Parking on Both Sides at a Local Street
SWD 13	Moody at Enhanced Pedestrian Street
SWD 14	Moody at Enhanced Pedestrian Street Intersection
SWD 15	Concrete Finishing Detail
SWD 16	Sandset Pavers at Street Parking
SWD 17	Typical Local Street Layout Criteria
SWD 18	Typical Enhanced Pedestrian Street Layout Criteria
SWD 19	Landscape, Green Street, Open space and Stormwater Management Area



STANDARD PLANS

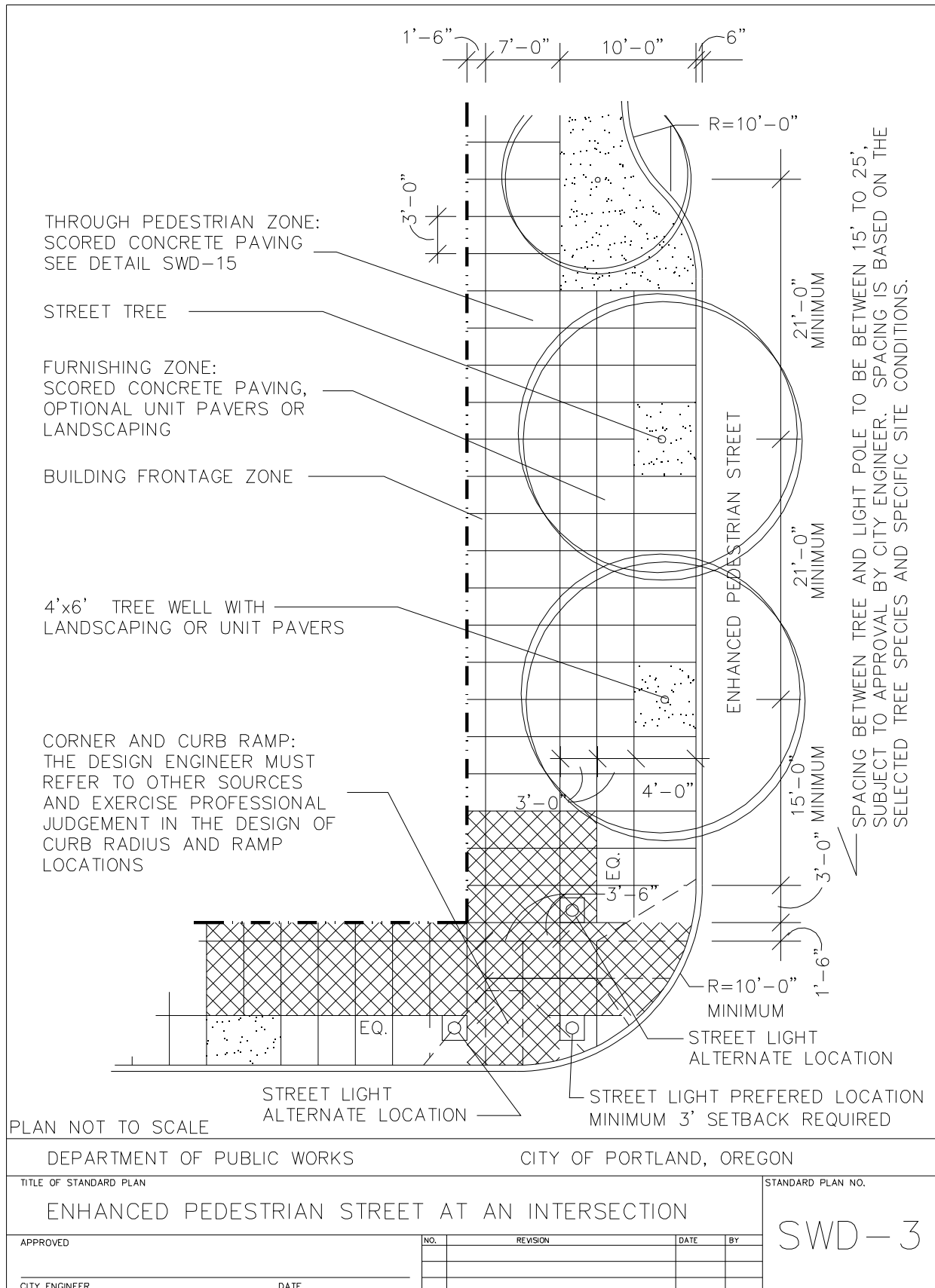


Note: All street designs will incorporate green stormwater facilities as directed by the Green Street Policy (City Council Resolution 36500, April 2007).

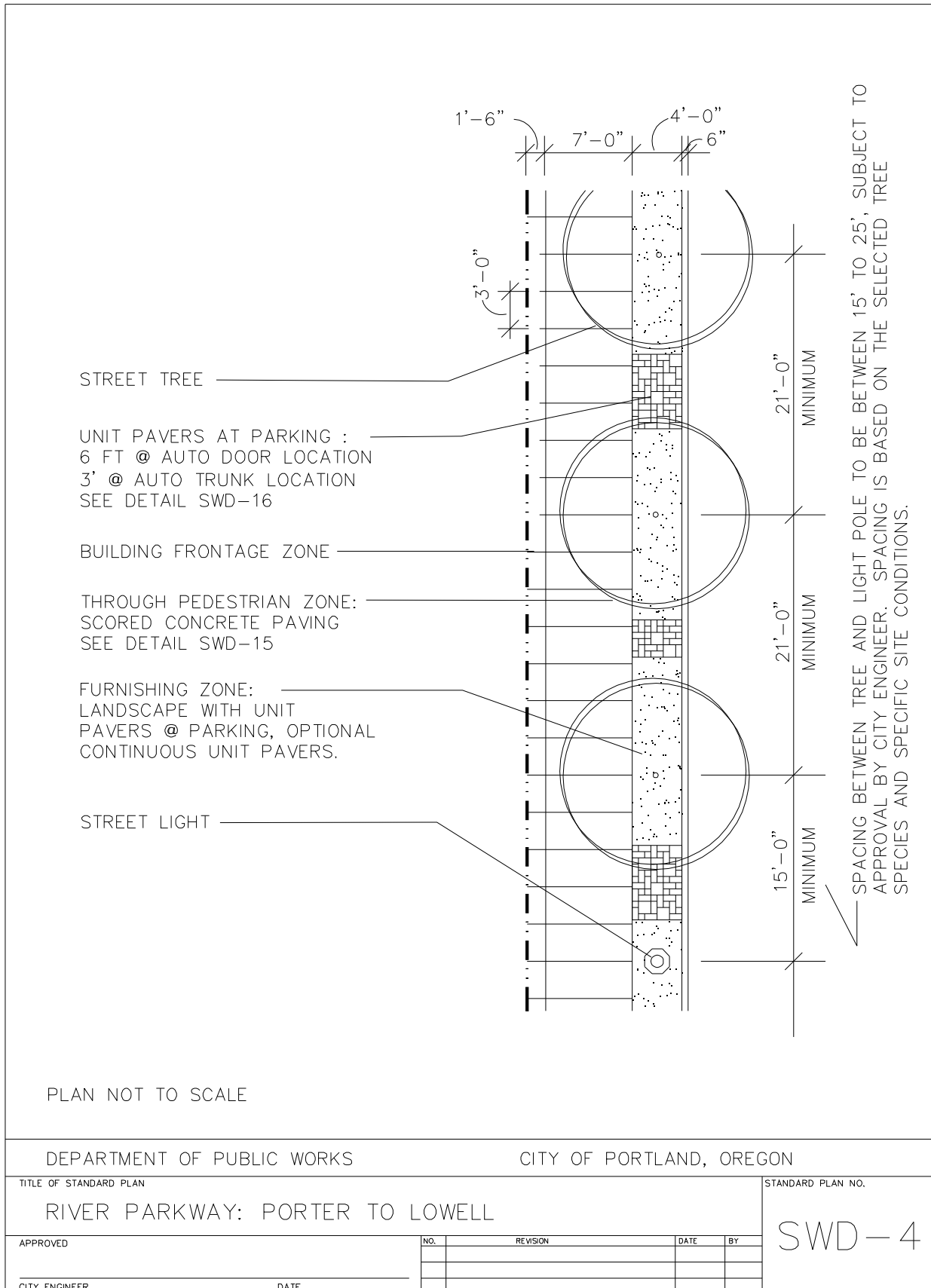


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STANDARD PLANS

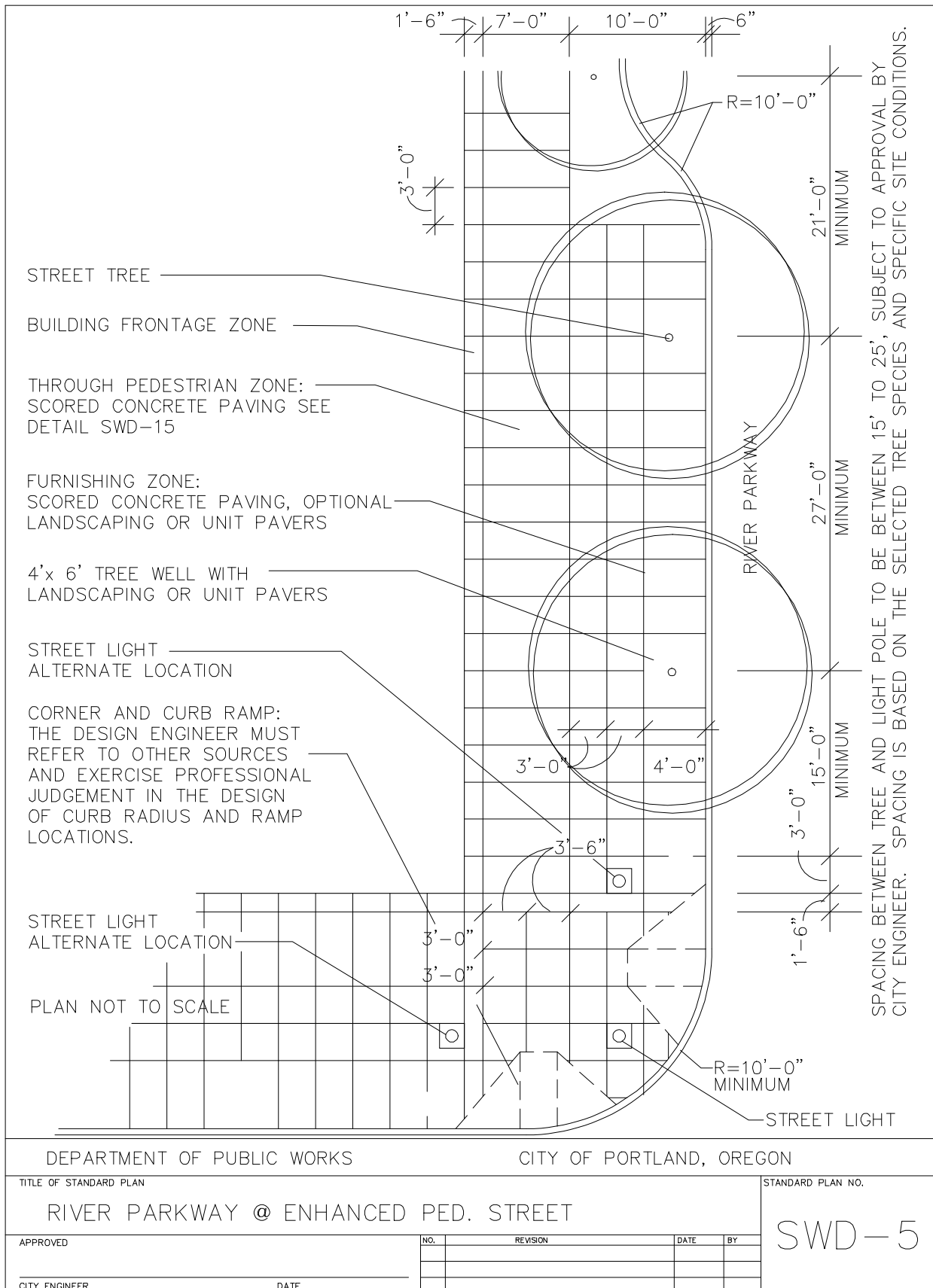


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STANDARD PLANS



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NOTE: TRANSITION SLABS
MUST BE DESIGNED DURING
FINAL ENGINEERING WITH
ROADWAY DESIGN.

PROVIDE CURB CUT WITH
APRON IF THIS LEG IS
PRIVATE.

MEDIUM BROOM CONCRETE
FINISH AT CURB RAMP

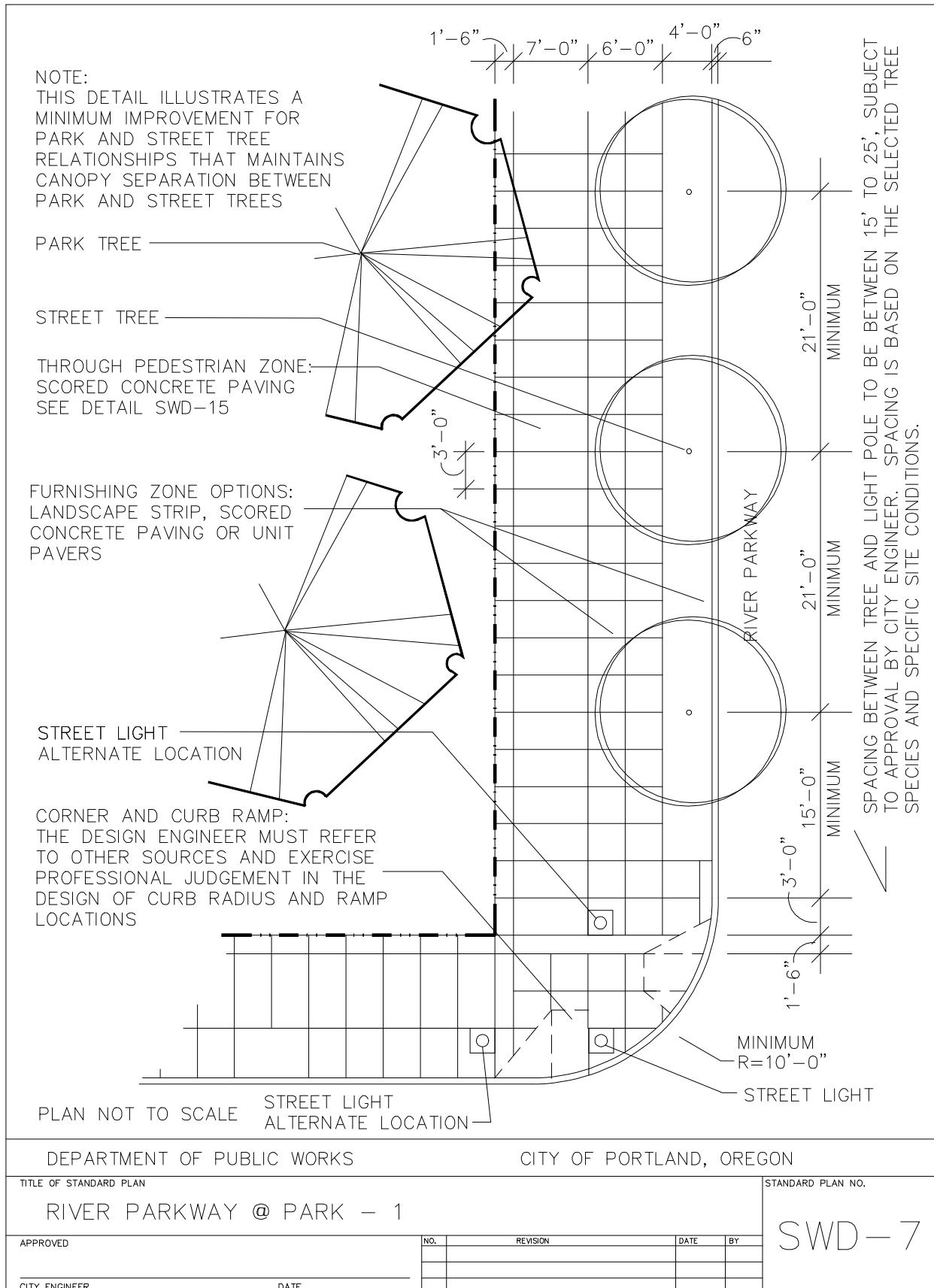
HEAVY BROOM
CONCRETE FINISH
(USING A CONCRETE
STREET BROOM)

PLAN NOT TO SCALE

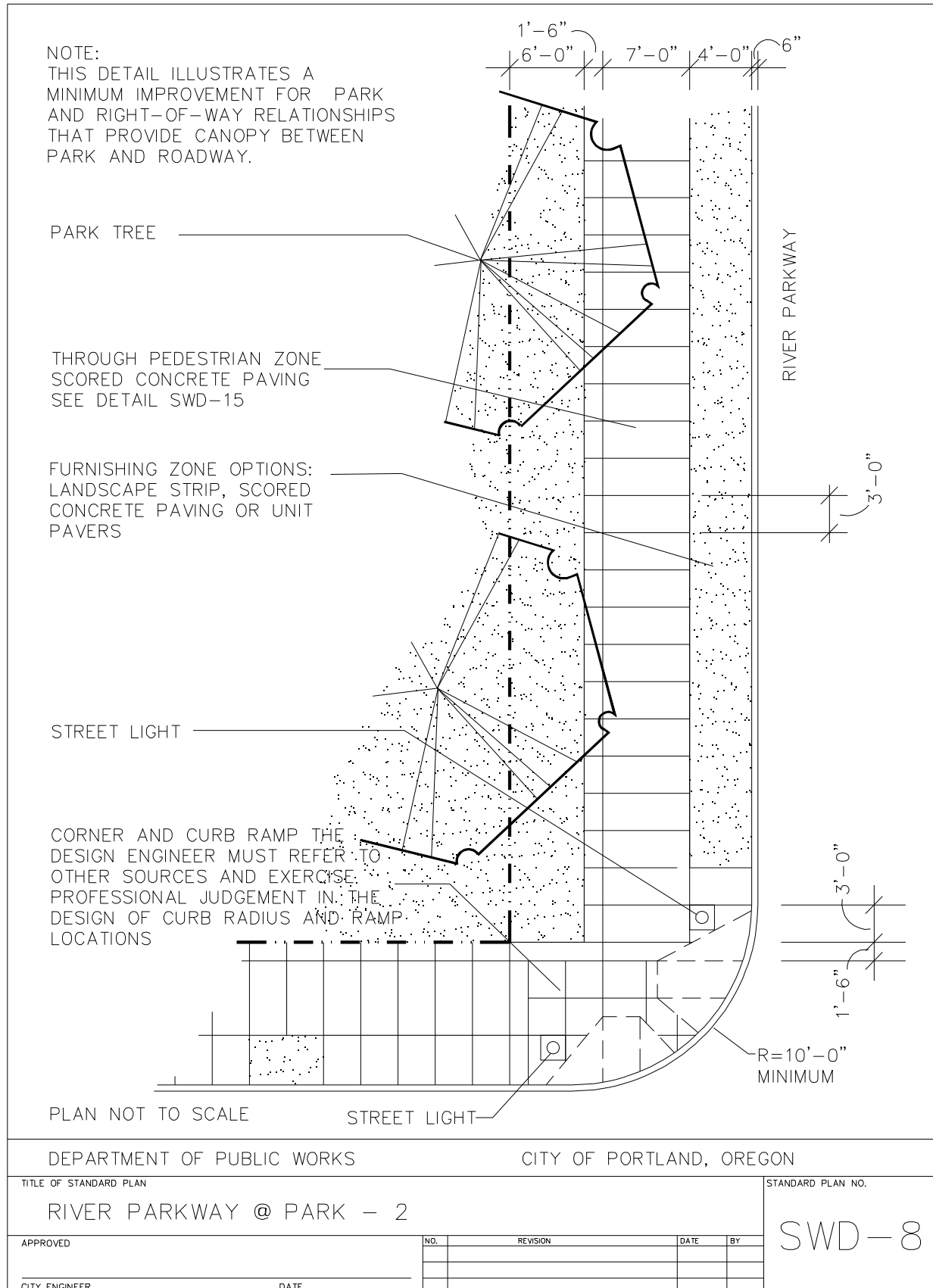
DEPARTMENT OF PUBLIC WORKS		CITY OF PORTLAND, OREGON	
TITLE OF STANDARD PLAN RIVER PARKWAY @ ENHANCED PEDESTRIAN STREET INTERSECTION			STANDARD PLAN NO. <div style="font-size: 2em; font-weight: bold;">SWD-6</div>
APPROVED _____ CITY ENGINEER	NO. _____ DATE	REVISION _____ BY	DATE _____ BY

Note: All street designs will incorporate green stormwater facilities as directed by the Green Street Policy (City Council Resolution 36500, April 2007).

STANDARD PLANS

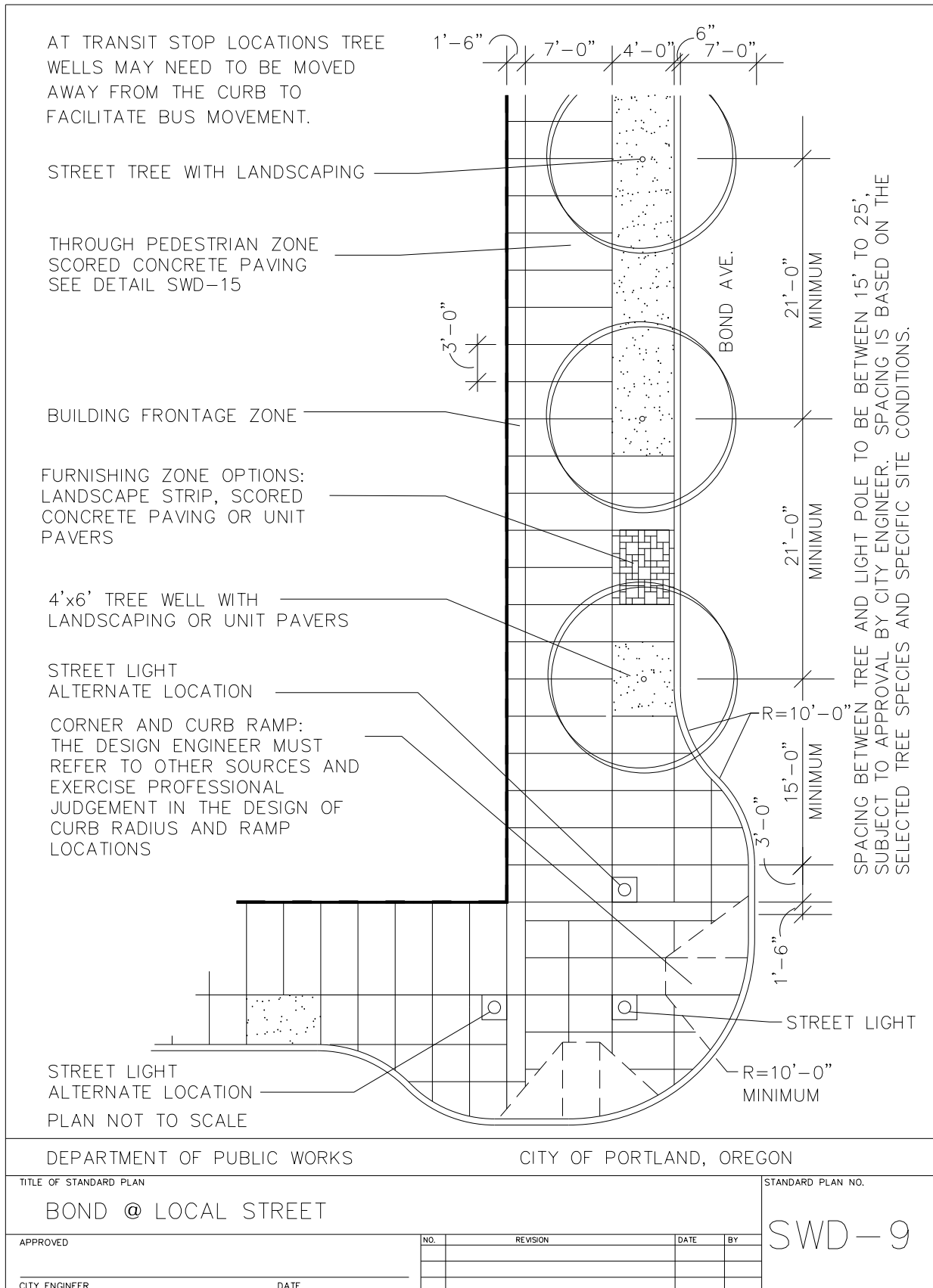


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STANDARD PLANS

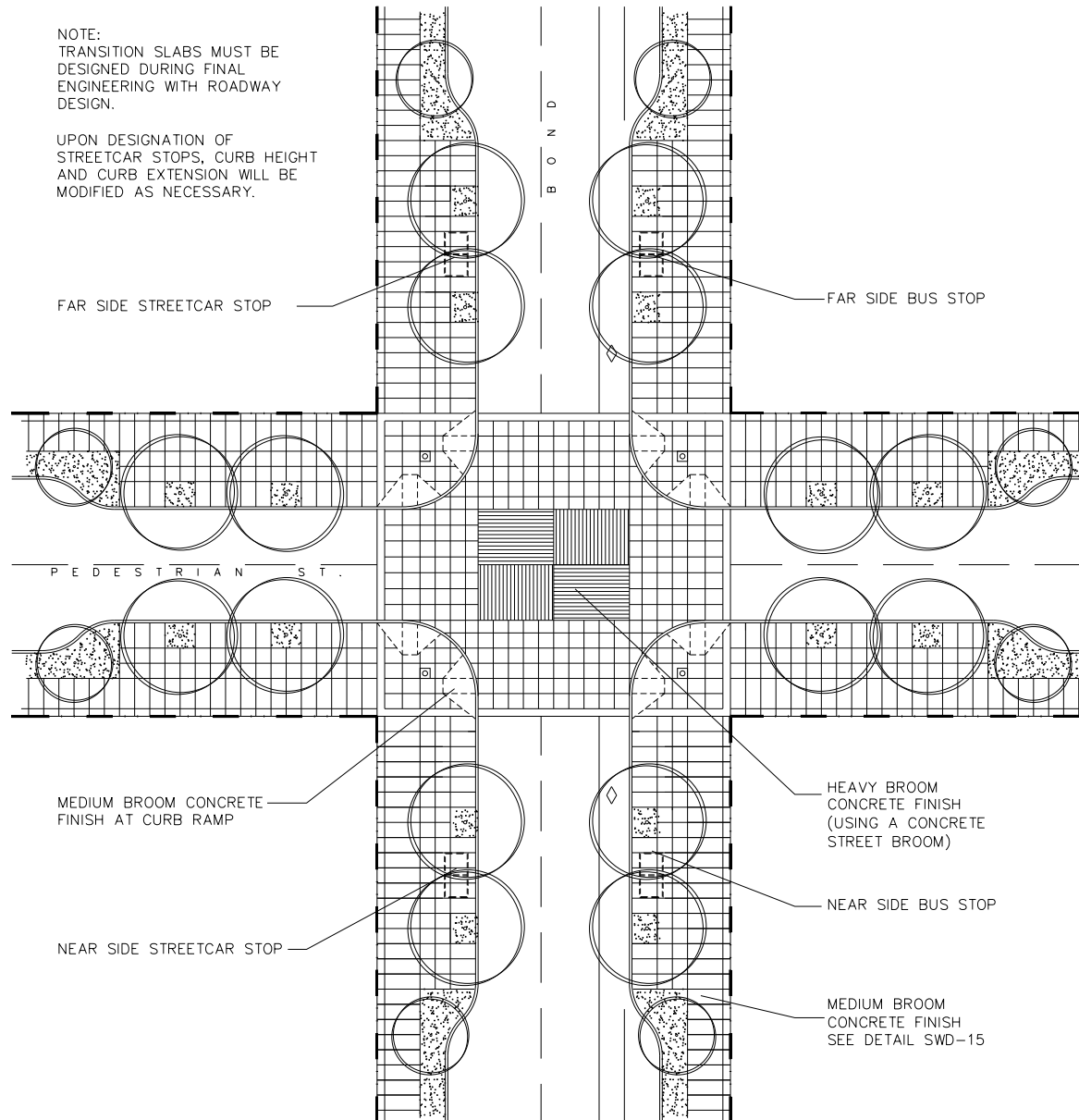


Note: All street designs will incorporate green stormwater facilities as directed by the Green Street Policy (City Council Resolution 36500, April 2007).

AT TRANSIT STOP LOCATIONS TREE WELLS MAY
NEED TO BE MOVED AWAY FROM THE CURB
TO FACILITATE BUS MOVEMENT.

NOTE:
TRANSITION SLABS MUST BE
DESIGNED DURING FINAL
ENGINEERING WITH ROADWAY
DESIGN.

UPON DESIGNATION OF
STREETCAR STOPS, CURB HEIGHT
AND CURB EXTENSION WILL BE
MODIFIED AS NECESSARY.



PLAN NOT TO SCALE

DEPARTMENT OF PUBLIC WORKS

CITY OF PORTLAND, OREGON

TITLE OF STANDARD PLAN

BOND @ ENHANCED PEDESTRIAN STREET INTERSECTION

STANDARD PLAN NO.

SWD-10

APPROVED

CITY ENGINEER

DATE

NO.

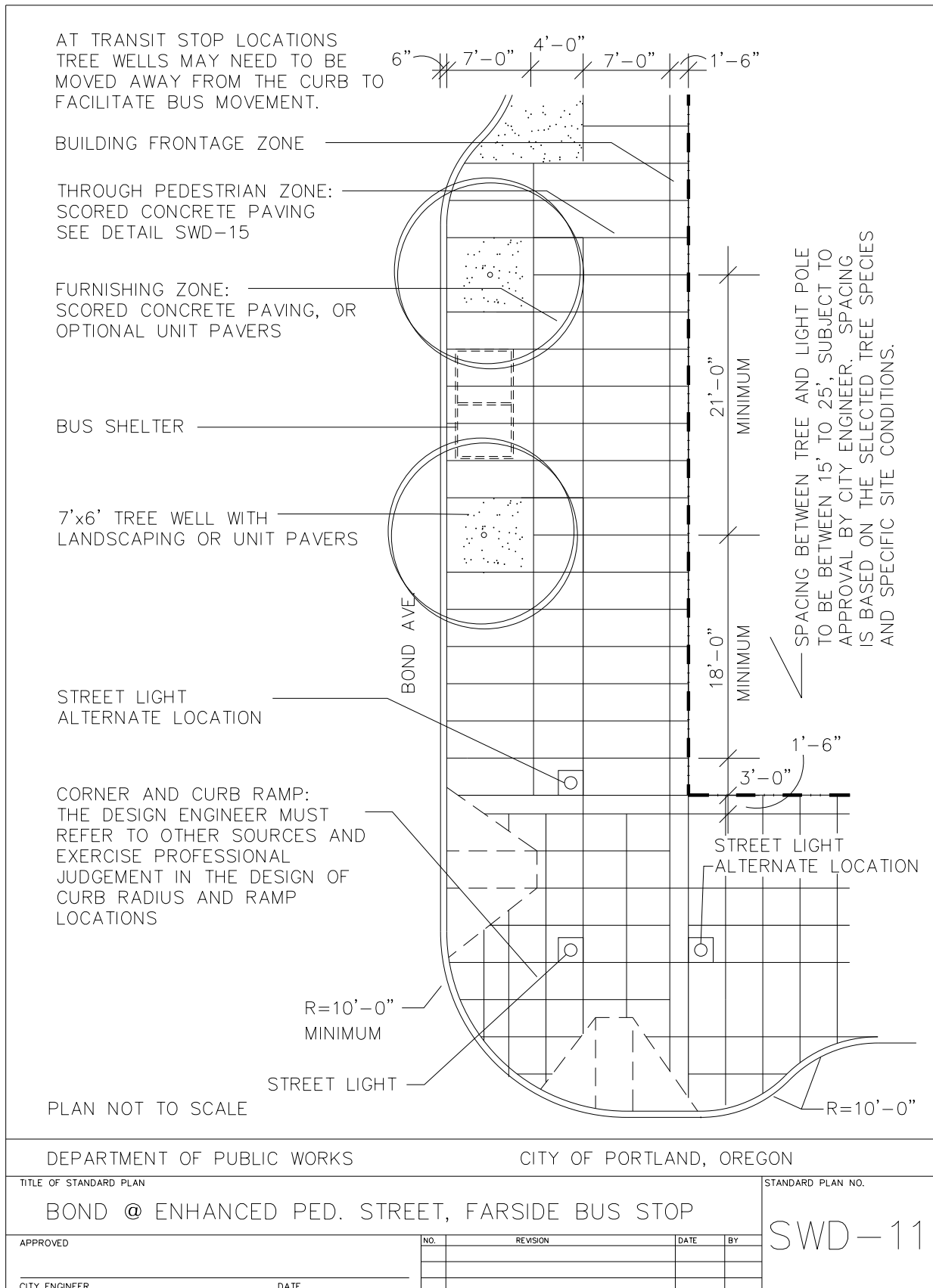
REVISION

DATE

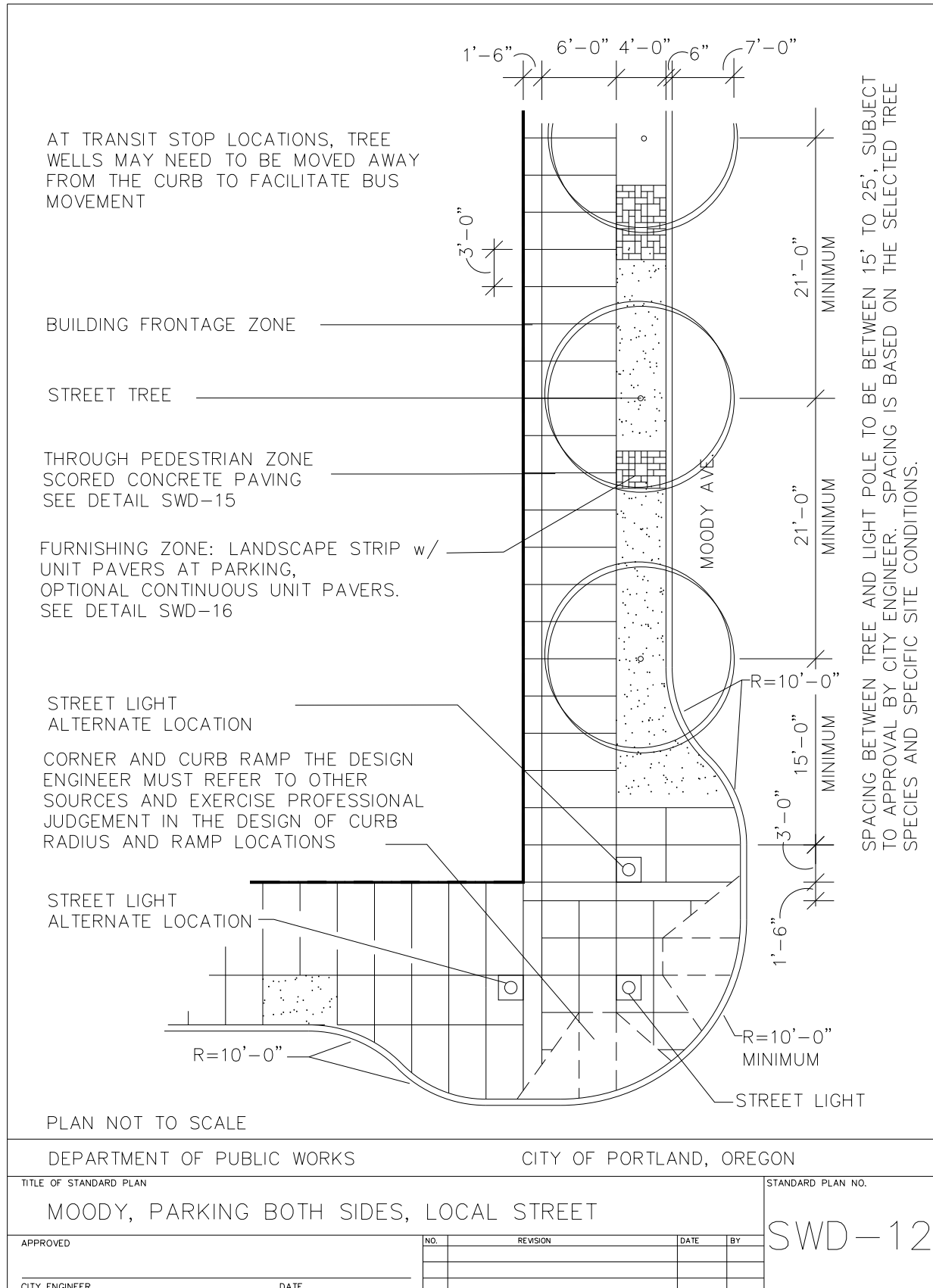
BY

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STANDARD PLANS

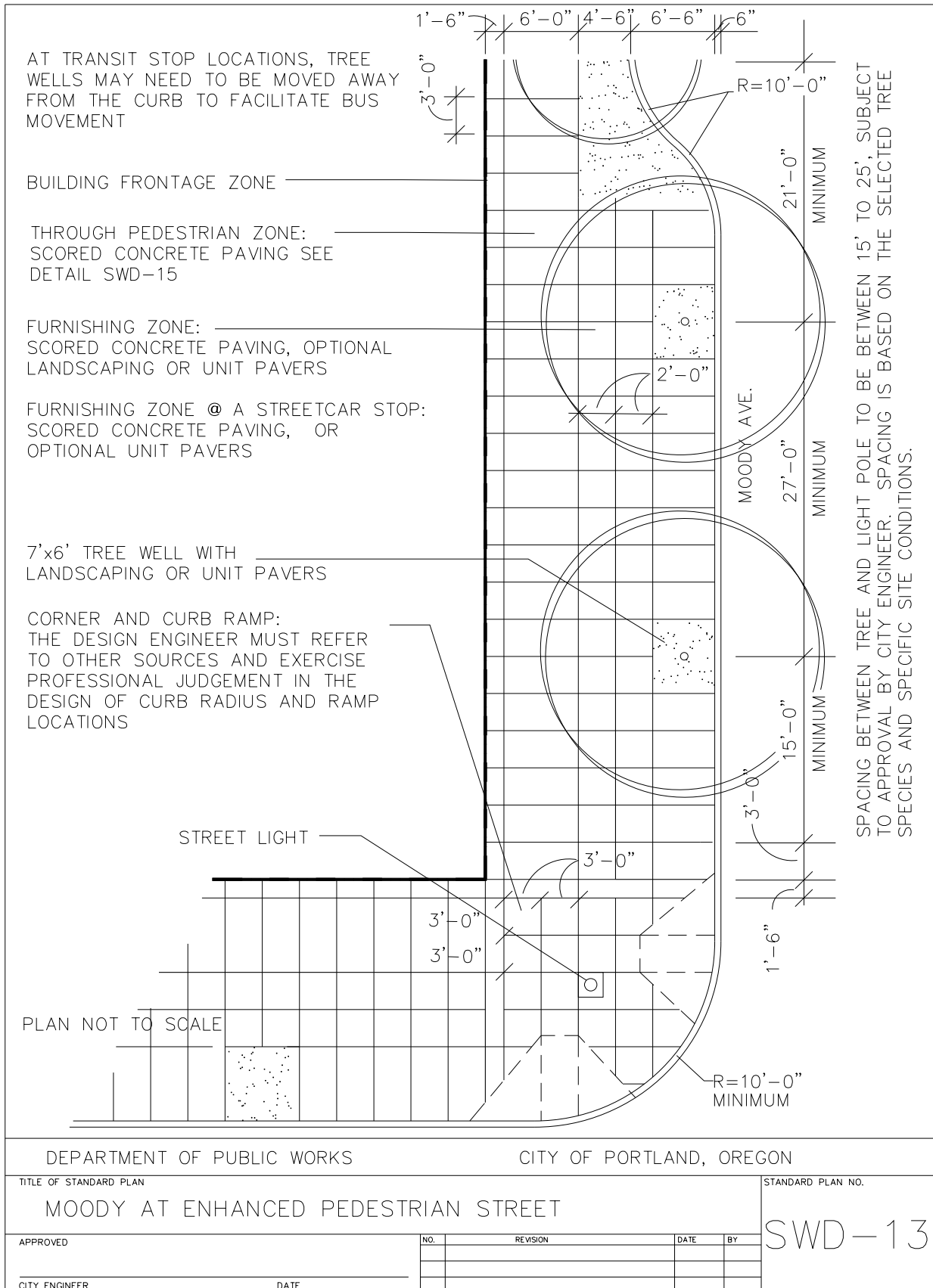


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TREE WELLS MAY NEED TO BE
MOVED AWAY FROM THE CURB
TO FACILITATE BUS MOVEMENT

NOTE:
TRANSITION SLABS MUST BE
DESIGNED DURING FINAL
ENGINEERING WITH ROADWAY
DESIGN.

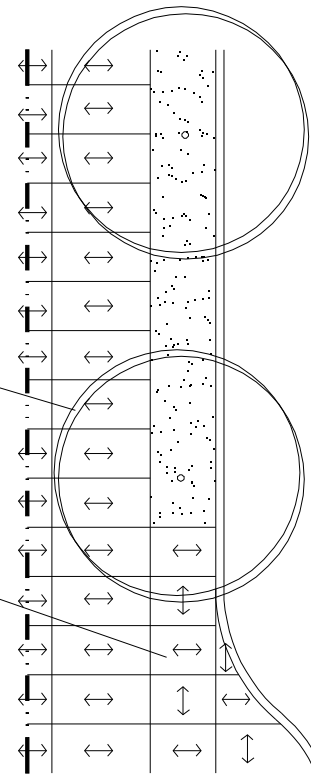
UPON DESIGNATION OF
STREETCAR STOPS, CURB HEIGHT
AND CURB EXTENSION WILL BE
MODIFIED AS NECESSARY.

DEPARTMENT OF PUBLIC WORKS		CITY OF PORTLAND, OREGON		
TITLE OF STANDARD PLAN			STANDARD PLAN NO.	
MOODY @ ENHANCED PEDESTRIAN STREET INTERSECTION			SWD-14	
APPROVED	NO.	REVISION		DATE
CITY ENGINEER	DATE			

Note: All street designs will incorporate green stormwater facilities as directed by the Green Street Policy (City Council Resolution 36500, April 2007).

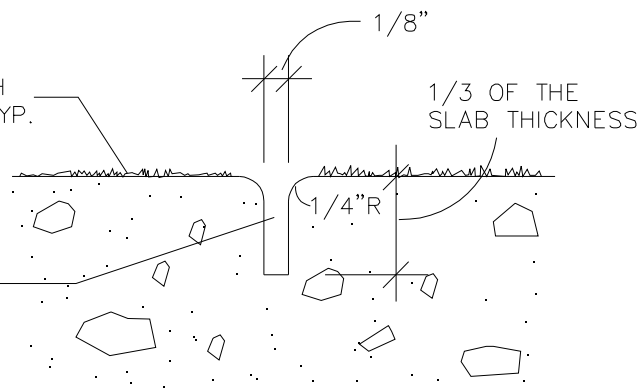
EXAMPLE OF DIRECTION
OF BROOMING PATTERN

ALTERNATE BROOM FINISH
BETWEEN CELLS IN
FURNISHING ZONE



MEDIUM BROOM FINISH
TO EDGE OF JOINT, TYP.

SCORE JOINT



PLAN NOT TO SCALE

DEPARTMENT OF PUBLIC WORKS

CITY OF PORTLAND, OREGON

TITLE OF STANDARD PLAN

CONCRETE FINISHING DETAIL

STANDARD PLAN NO.

SWD-15

APPROVED

CITY ENGINEER

DATE

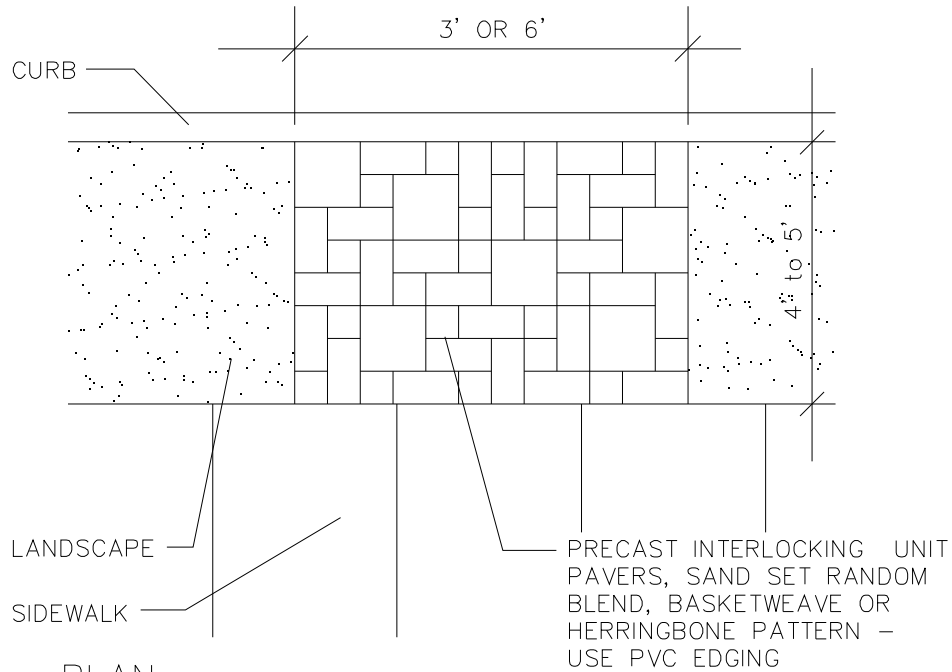
NO.

REVISION

DATE

BY

Note: All street designs will incorporate green stormwater facilities as directed by the Green Street Policy (City Council Resolution 36500, April 2007).



NOT TO SCALE

DEPARTMENT OF PUBLIC WORKS

CITY OF PORTLAND, OREGON

TITLE OF STANDARD PLAN

SAND SET PAVERS AT STREET PARKING

STANDARD PLAN NO.

SWD-16

APPROVED

NO.

REVISION

DATE

BY

CITY ENGINEER

DATE

Note: All street designs will incorporate green stormwater facilities as directed by the Green Street Policy (City Council Resolution 36500, April 2007).

STANDARD PLANS

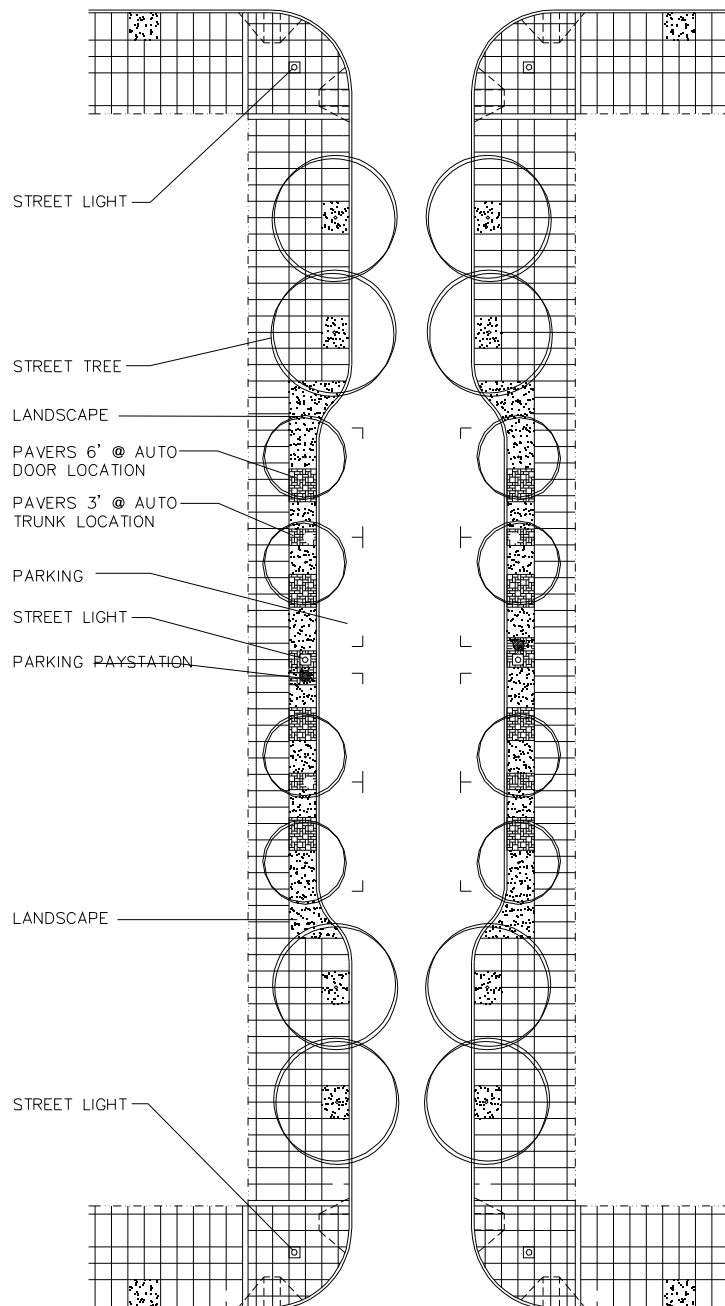
AT TRANSIT STOP LOCATIONS,
TREE WELLS MAY NEED TO BE
MOVED AWAY FROM THE CURB
TO FACILITATE BUS MOVEMENT

NOTE:
NO CURB-EXTENSIONS
@ LOADING ZONES.

PLAN NOT TO SCALE

DEPARTMENT OF PUBLIC WORKS		CITY OF PORTLAND, OREGON		
TITLE OF STANDARD PLAN			STANDARD PLAN NO.	
TYPICAL LOCAL STREET LAYOUT CRITERIA			SWD-17	
APPROVED	NO.	REVISION		DATE
CITY ENGINEER	DATE			

Note: All street designs will incorporate green stormwater facilities as directed by the Green Street Policy (City Council Resolution 36500, April 2007).



PLAN NOT TO SCALE

DEPARTMENT OF PUBLIC WORKS

CITY OF PORTLAND, OREGON

TITLE OF STANDARD PLAN

TYPICAL PEDESTRIAN ENHANCED STREET LAYOUT CRITERIA

STANDARD PLAN NO.

SWD-18

APPROVED

NO.

REVISION

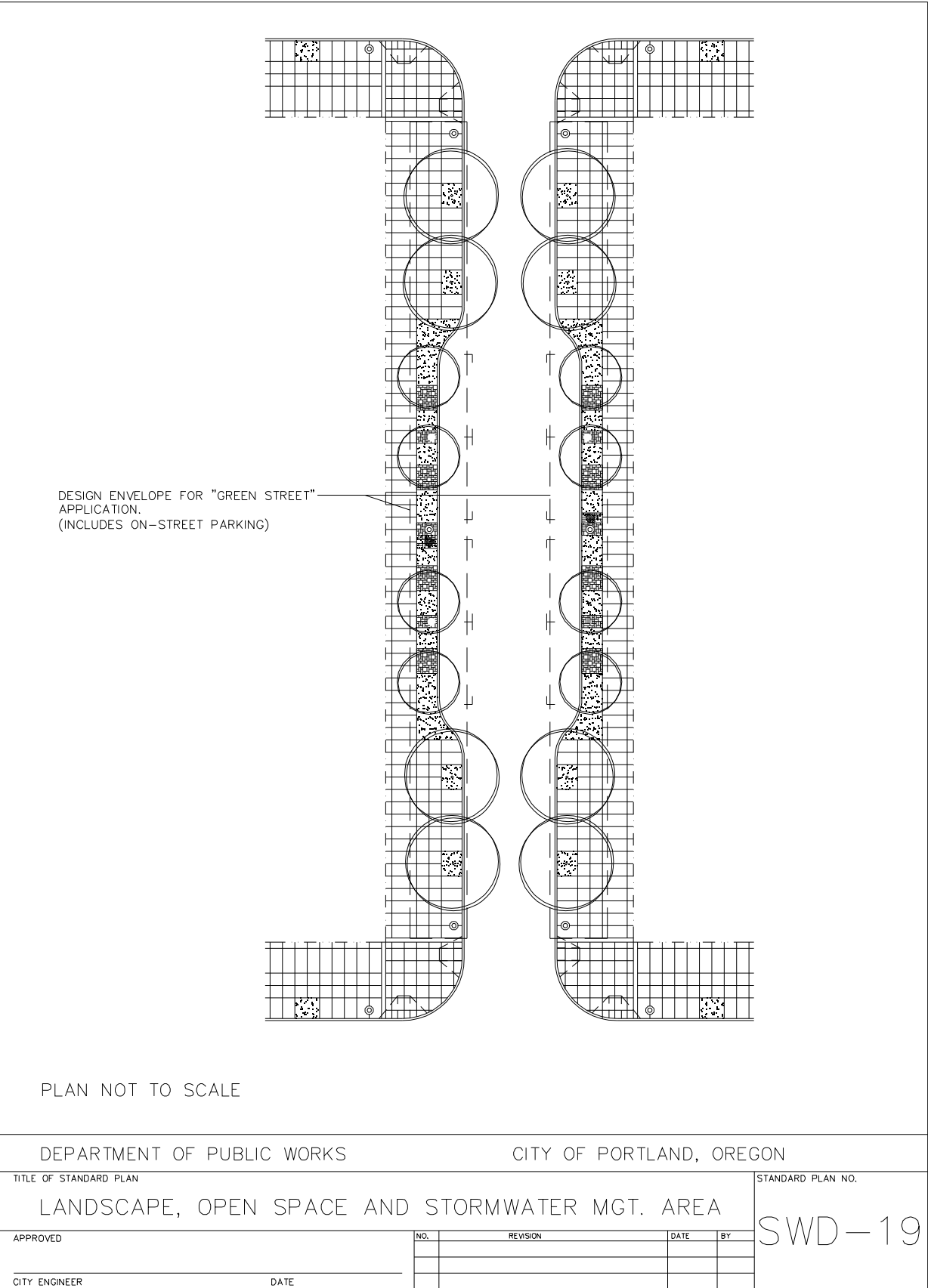
DATE

BY

CITY ENGINEER

DATE

Note: All street designs will incorporate green stormwater facilities as directed by the Green Street Policy (City Council Resolution 36500, April 2007).



Note: All street designs will incorporate green stormwater facilities as directed by the Green Street Policy (City Council Resolution 36500, April 2007).

RESOLUTION No. 36753

Amend the *South Waterfront District Street Plan, Criteria, and Standards* document and direct its implementation. (Resolution)

WHEREAS, the South Waterfront District is an important subdistrict of the Central City, with expected development of 1900 to 3000 new housing units and 8500 to 10,000 new jobs; and

WHEREAS, continued development of the South Waterfront District is a high priority for the City of Portland; and

WHEREAS, the street plan identifies the location and characteristics of public rights-of-way and provides certainty to private developers; and

WHEREAS, in 1996, the Portland City Council accepted the City Engineer's Report titled *North Macadam District Street Plan* which identified and classified a street system for the North Macadam District; and

WHEREAS, in August 1999, the City Council adopted the North Macadam District Framework Plan by Resolution 35815; and

WHEREAS, on November 13, 2002, by Ordinance No. 177082 and Resolution 36111, the City Council adopted the South Waterfront Plan as a subdistrict plan in the Central City ("South Waterfront Plan") superceding the North Macadam District Framework Plan; and

WHEREAS, in October 29, 2003, the revised *South Waterfront District Street Plan* was accepted by the City Council by Resolution 36178, depicting the Moody/Bond Streetcar alignment as adopted in the *South Waterfront Plan*; and

WHEREAS, in fall 2007 the *South Waterfront District Street Plan* was again revised by authority of the City Engineer under of Title 17 City Code to reflect development and transportation infrastructure that had occurred in the District since 2003; and

WHEREAS, on April 8, 2009, City of Portland approved the North Macadam Transportation Development Strategy (the Strategy) by Resolution 36696 and directed city staff to update the Street Plan to include the projects and priorities identified in the Strategy; and

WHEREAS, in November 2008, the Mayor convened the South Waterfront North District Partnership, whose members included the City of Portland, North District property owners, and entities with regional interests in the District, including TriMet, Metro, and Portland Streetcar, with the purpose of coming to consensus on North District infrastructure and development layout and associated cost responsibilities; and

WHEREAS, the North District Partnership came to agreement on amendments to the South Waterfront District Street Plan; and

WHEREAS, extensive public involvement has included one well-attended public open house, and presentations at five neighborhood association meetings and two City advisory committee meetings; and

WHEREAS, the Street Plan updates were presented to the North Macadam Urban Renewal Area Committee on May 14, 2009, to the Portland Design Commission on May 21, 2009, and to the Portland Planning Commission on June 9, 2009; and

WHEREAS, the Street Plan updates reflect the Portland to Milwaukie Light Rail Locally Preferred Alternative (LPA) alignment and current development plans for the District;

NOW, THEREFORE, BE IT RESOLVED, that the City of Portland adopts *the South Waterfront District Street Plan, Criteria and Standards* document as Non-Binding City Policy attached as Exhibit A; and

BE IT FURTHER RESOLVED, that the City Engineer shall issue a new draft report of *the South Waterfront District Street Plan, Criteria and Standards* document to guide the design and construction of transportation improvements in the South Waterfront District; and

BE IT FURTHER RESOLVED, that the City Council directs city staff to update the Transportation System Plan and the South Waterfront Zoning Code to reflect the street network identified in the Street Plan; and

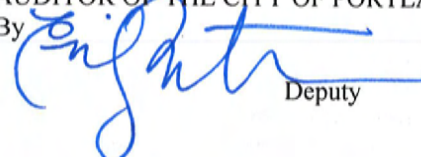
BE IT FURTHER RESOLVED, that the City Council directs city staff to continue to work together with district property owners and interested parties to implement the Street Plan.

Adopted by the Council, NOV 18 2009

Mayor Sam Adams
Prepared by: Clay Veka:slg
Date Prepared: 10.5.09

LaVonne Griffin-Valade
AUDITOR OF THE CITY OF PORTLAND

By



Deputy

-1622

Agenda No.
RESOLUTION NO. 36753

Title

Amend the *South Waterfront District Street Plan, Criteria, and Standards* document and direct its implementation. (Resolution)

INTRODUCED BY Commissioner/Auditor: MAYOR SAM ADAMS	CLERK USE: DATE FILED <u>NOV 13 2009</u>
COMMISSIONER APPROVAL <i>Official for Mayor Adams</i> Mayor—Finance and Administration - Adams	LaVonne Griffin-Valade Auditor of the City of Portland
Position 1/Utilities - Fritz	By: <u><i>[Signature]</i></u> Deputy
Position 2/Works - Fish	
Position 3/Affairs - Saltzman	
Position 4/Safety - Leonard	
BUREAU APPROVAL Bureau: Bureau of Transportation Group Manager: Greg Jones Development & Capital Program <i>[Signature]</i> Other <i>Any</i>	ACTION TAKEN:
Prepared by: Clay Veka Date Prepared: 10-5-09	
Financial Impact Statement Completed <input checked="" type="checkbox"/> Amends Budget <input type="checkbox"/> Not Required <input type="checkbox"/>	
Portland Policy Document If "Yes" requires City Policy paragraph stated in document. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Council Meeting Date NOVEMBER 18, 2009	
City Attorney Approval	

AGENDA
TIME CERTAIN <input type="checkbox"/> Start time: _____ Total amount of time needed: _____ (for presentation, testimony and discussion)
CONSENT <input type="checkbox"/>
REGULAR <input checked="" type="checkbox"/> Total amount of time needed: 30 min (for presentation, testimony and discussion)

FOUR-FIFTHS AGENDA	COMMISSIONERS VOTED AS FOLLOWS:		
		YEAS	NAYS
1. Fritz	1. Fritz	<input checked="" type="checkbox"/>	
2. Fish	2. Fish	<input checked="" type="checkbox"/>	
3. Saltzman	3. Saltzman	<input checked="" type="checkbox"/>	
4. Leonard	4. Leonard	<input checked="" type="checkbox"/>	
Adams	Adams	<input checked="" type="checkbox"/>	